

SEQUENCE LISTING

<110> Sun, Yongming
 Recipon, Herve
 Ghosh, Malavika
 Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific
 Genes and Proteins

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<150> 60/244,717

<151> 2000-10-31

<160> 250

<170> PatentIn Ver. 2.1

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<223> a, c, g or t

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 <213> Homo sapiens

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 <212> DNA
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<223> a, c, g or t

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<210> 16
 <211> 984
 <212> DNA
 <213> Homo sapiens

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984

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<210> 17
<211> 429
<212> DNA
<213> Homo sapiens

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429

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<210> 18
<211> 734
<212> DNA
<213> Homo sapiens

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<210> 19
 <211> 1184
 <212> DNA
 <213> Homo sapiens

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 <211> 550
 <212> DNA
 <213> Homo sapiens

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 caggctctag gaacagccag catcaccaga ggtgccactt agtgagtacc cagtgggctc 480
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<210> 21

<211> 599
 <212> DNA
 <213> Homo sapiens

<400> 21
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<210> 22
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 22
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 taataaaaact taaaagggat ggacacagat tgaaaaaggc cttgagtgcc aagacaagag 180
 ctctgaactt taacaggcac tggaaaccgt cataggtctt aggtaggaat atgctgtgct 240
 cccaccatct taattaggct ttatggagggt ttgatagcaa gagggtagga atatcattta 300
 gcaggctact gcaagtatcc aggtgaaatg tacagagggt ttgaactagg ctgctgggga 360
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<210> 23
 <211> 711
 <212> DNA
 <213> Homo sapiens

<400> 23
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 caagtatatg tggtagttga taagaaaggc agataataaa acttaaaaagg gatggacaca 240
 gattgaaaaa ggccttgagt gccaaagaca gagctctgaa ctttaaacagg cactggaaac 300
 cgtcataggt cttaggtagg aatatgctgt gctcccacca tcttaattag gtcttatgga 360

ggtttgatag caagagggta ggaatatcat ttagcaggct actgcaagta tccaggtgaa 420
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tgaccaactt cttaagttaa aatgtgcaac agtcattgaa aatatgagtt t 711

<210> 24
<211> 547
<212> DNA
<213> Homo sapiens

<400> 24
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aataataatt ttatagaatt tttcatttta tggcaggcac aggggtcatg cctgtaatcc 540
cagcact 547

<210> 25
<211> 549
<212> DNA
<213> Homo sapiens

<400> 25
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gagatgggg 549

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<211> 350
<212> DNA
<213> Homo sapiens

<400> 26
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 gatggcttac gtgcagggta atgtatgaac cttcccaagc tctgtacaaa tataacttgt 180
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 gcaggcagtg aaaccgtgga ctcagctgct ctttccttct ttctctccca 350

<210> 27
 <211> 627
 <212> DNA
 <213> Homo sapiens

<400> 27
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<210> 28
 <211> 548
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (132)..(348)
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<211> 988
<212> DNA
<213> Homo sapiens

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tatctcatga gtagcctaag aaaaaagc 988

<210> 30
<211> 651
<212> DNA
<213> Homo sapiens

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ctgtttaata taggaagcac aaacgtgact gaagttacaa gagactgaga caactttcaa 600
aactcatggg gggagaattt tatcacttca acagaaactt aacaatttaa c 651

<210> 31
 <211> 553
 <212> DNA
 <213> Homo sapiens

<400> 31
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 cctggacact tgctaggcct tttcagtcct gaagctcatg actttcaggt aagagaaatt 540
 tacgtctaag acc 553

<210> 32
 <211> 2159
 <212> DNA
 <213> Homo sapiens

<400> 32
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 tttggagggt acagataatg ctactataaa catccatgtg caggtttttg tgtgaatgta 180
 aagtttccaa ttcatttgag taaataccaa agcatgcaat tgctacatca tataaaagta 240
 tgtttggtac tataagaaac tgccaaactg tctctttaag tggctatgca tattttcact 300
 tccaccagca ataaatggag ttctgttgc tccacatgct cactagcatt tgggtgtgtc 360
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 caattcccta atgacatatg atgttgaaca tcttctcata tgcttatttg ccatctgtat 480
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 tctcactctt gtcaccaggt ctggagtgc gtggcacgat ctgagctcac tgcaacctct 600
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 cccaccacca cgcccaggta atttttatat ttttcataga gatgggggtt cgccatattg 720
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aaaaactcag ttaagagaga agggatgctt taaaaaaaaa aaaagaggtc ttagacgtaa 1620
atttctctta cctgaaagtc atgagcttcg agactgaaaa ggcctagcaa gtgtccagga 1680
cagtggatca aagtggacct ataccatgat acatctcagt gaagtttcag gacacttgaa 1740
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gaatcagaat ggcacagac tctccaactg caaaagacag agcagtgcct tcaaaattct 1860
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gttttgtttt taaaacgtct tttggatcaa tcatgagatg tagaatctaa taaaaccttt 2040
ttatgattta tctcccataa accatttttt caggaaagta gataatatgc tccacaaaat 2100
aaagtacatc aaggaaaaaa ggcaccttag tctttgatgg aagaaaggagg aagtccagt 2159
```

<210> 33

<211> 450

<212> DNA

<213> Homo sapiens

<400> 33

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agaaaacaag atccagatac aaaaatcgat tgtatttttaa ctatgctaata aattagcaga 60
tattgaaact ttttaaacat acaattttatt atagcatcag aaaaatggaa tgcttaagta 120
taaactctgac aaaaaatgtg agctacctgt acactggacc actaaacact agtgaaacaa 180
aattgaagag ctacttaatt ggaaatcagt ttccccccag atttatctat agagtccagt 240
aaatcccaat caaaatctca gcaagggtctt taagaaattg acaatcttat tttaaaattt 300
aagtggagat gcgaaataac taaagcaatt ctctgacaaa aacaagaaaa aagctagaag 360
gctaacaacc acactgattg caagattttat cagaacagggt ataataatca ggccagtgtc 420
atatcggcac acacgataga ccaggagatc 450
```

<210> 34

<211> 584

<212> DNA

<213> Homo sapiens

<400> 34

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ctagacttat ggatttgagg gagctgtgtg aaactcatca tggcaaatat gcttatgtgt 60
atatatcctt tgccatacat gtgctgcaaa ctgtaatgaa atgttattta taagactggg 120
aaggcatgtg ttattagact ggacacacaa aagcccttga ttatctagga agcaatcctc 180
taggggccag atgtagtttg gaatgtgggt gtttagtata actgtacttc attactgatt 240
tttatttcta tgctgtttga ctgtattagc tctttgttat tattggggag gtagccagag 300
gtctccagat tcccataatg aatttacagg tgtgatctta tggacaagga ggagtcagct 360
gtattagttg ggggttcaat cttgacctgat aagcttttcc tagttgggtt tacagatacg 420
agccctgata tactccctgc tgccactgtc tgtttctatg atgcatgtca ccatgatata 480
tgagtatgta tgaaaatata tttaggctaa ttttaactag aatatggaaa ggaaaaagtt 540
ctattgctct gcattgctct gttttcagca atcactgttt ttca 584
```

<210> 35
 <211> 642
 <212> DNA
 <213> Homo sapiens

<400> 35
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 tatatatcct ttgccataca tgtgctgcaa actgtaatga aatgttatTTT ataagactgg 120
 taaggcatgt gttatttagac tggacacaca aaagcccttg attatctagg aagcaatcct 180
 ctagggtcca gatgtagttt ggaatgtggg tgttttagtat cactgtactt cattactgat 240
 ttttattttct atgctgtttg actgtattag ctctttgtta ttattgggga ggtagccaga 300
 ggtctccaga ttcccataat gaatttacag gtgtgatcct atggacaagg aggagtcagc 360
 tgtattagtt ggggggttcaa tcttgccctga taagcttttc ctagttaggt ttacagatac 420
 gagccctgat ctactccctg ctgccactgt ctgtttctat gatgcatgtc accatgatat 480
 ctgagtatgt atgaaaatat atttaggcta attttaacta gaatatggaa aggaaaaagt 540
 tctattgctc tgcatttgct ctgtttttca gcaatcactg tttttcacc acatatagaa 600
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<210> 36
 <211> 669
 <212> DNA
 <213> Homo sapiens

<400> 36
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 ttgaaggctc ctgaccacat tattegcaat tctaactctc ttgccacccc ttccccatga 120
 cccatgtaca attacatgct ctagatcttc tcctcaaaga tgaacataag tctgaaatat 180
 caacaccttg gcagccctat tatcaattgc tgatctgtag tccccatgta agtacgcctt 240
 ttttagcaac cagttttttgt cccagccata ttaatacttg tggtcagtgg ttaacaatgt 300
 tgaagcttaa attatatcca gatgaaattt taaaaaggaa tcaacttgtgt tcctctgtgt 360
 taacacagga atcccagcat gtgtttctct tccaggaaac cataattata tgtacaaata 420
 tctaccogga caattagggg cataatcatg ctctaaatag aagtgttcaa acaagtcaac 480
 accttctctc cagttattcc tctttcttct ttctcttaga tgtcatgggt tctgtgtctc 540
 aagacattta tgatttgatt tttctaacc tttctagggt ctattagagt caattagaca 600
 acatattcct tctttctaa aatctggaca aggaggtata cttttctaaa ttttaatcct 660
 attaatgcc 669

<210> 37
 <211> 1006
 <212> DNA
 <213> Homo sapiens

<400> 37
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 caaataggct cagaaggtaa aatgaggacc caaggataga agagcgacag tgatttcagc 120
 tgagcctcag ttccaagcac agaacttttc agaaacagaa tgggttgcat aatatgtccc 180

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cttttaaaag acactttgca gacctggatg cctgtgtgtt ggcattggagc atagagggtt 240
cctgtcctgg gtaaacaatgc tgtgctggac taggttctct ctgaaagtct ctccctgctt 300
caggagtcta gaattctaag tttcttctca ggagactcca aaatttacta gaatgtcctg 360
aaccacatct ttcataatgt tgctgactca aagactcttg aaggctcctg accacattat 420
tcgcaattct aactctcttg ccaccccttc cccatgaccc atgtacaatt acatgctcta 480
gatcttctcc tcaaagatga acataagtct gaaatatcaa caccttggca gccctattat 540
caattgctga tctgtagtcc ccatgtaagt acgccttttt tagcaaccag tttttgtccc 600
agccatatta atacttgtgg tcagtgggta acaatgttga agcttaaatt atatccagat 660
gaaattttta aaaggaatca cttgtgttcc tctgtgttaa cacaggaatc ccagcatgtg 720
tttctcttcc aggaaacat aattatatgt acaatatctt acccggacaa ttaggggcat 780
aatcatgctc taaatagaag tgttcaaaca agtcaacacc ttctctccag ttattcctct 840
ttcttctttc tcttagatgt catgggttct gtgtctcaag acatttatga tttgattttt 900
ctaacccttt ctagggttcta ttagagtcaa ttagacaaca tattccttct ttctaagaat 960
ctggacaagg aggtatactt ttctaaattt taatcctatt aatgcc 1006

```

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<210> 38
<211> 589
<212> DNA
<213> Homo sapiens

```

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<400> 38
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ttcatatccc catctataaa atgaaaacac aatacttctc accaactt atacagcacc 120
tactatgtgc taggttagag atcataaact ggtgatatgt aagtggata taaccctcag 180
acttggctct tgtgttctac gcagttgatc tgcaccagcc tttgttaaaa ttggaaggaa 240
attgctaata tttaaaatca ggatatttcc cagaaaaatc tacatttcta gtatctcaga 300
aaaatcatta tttggcagca ctggggccaga atttctgcag ggcaattgtt gtcctgactt 360
gggtggctgg tggaaatggg cgtgtactcc taagtttgtc ccaattgcta ccgctctatt 420
acttcacctt ttaatgttca ctactcttgg ccctgtggga tttttgaggc tgagattcct 480
atattaggtt ctgaaggcaa aacacacaca gaaaagaatg atttcaggcc cttcctgagc 540
atactcatga tgtataactt ttatgacagt aatagtagta tctagcaat 589

```

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<210> 39
<211> 528
<212> DNA
<213> Homo sapiens

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<400> 39
aagacctgtc tttattttta gaagtaagaa taaaagagat tgtggtggag tatcacaggc 60
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aaaggccaaa ctgattaata agggataaat aaagtcatgc aaatgaaaag gttgtatatg 180
tgttggggga aagcattcca gacagaagga ccagtgtgtg caaaggccct ggggtgagag 240
gtgcctaata agtactgaat atacaaagag gtagagctgg gactaaacca ctgtgctcac 300
tttgcttctg tgaattccga ttccaaggag tggaaatagac ttcaaagtgc ttcaagtcca 360
cttgtttctg ccaagtcttc atttttgttc catgaaggca gagcaccttc tttatttcat 420
ccactgatga cttctcagcc tctagaattc tgccttatga tggatttctc agaaatatgt 480

```

ttgtgtaatg aagacaagga cagtggtag agtttacatt ctactggg

528

<210> 40

<211> 673

<212> DNA

<213> Homo sapiens

<400> 40

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caaaaaataa aaacccaaaac attagttggg cgtggtagtg tgtcccaggt actcaggaag 60
ctgaggtggg aggattgctt gagtcccga gttggatgct gcagtgagct atgattgtgc 120
cactgcagcc tgggtgacag aacaagacc tgtctttaa aacaagaagt aagaataaaa 180
gagattgtgg tggagtatca caggcagcg gggagcactg agggagcccc tgaccacccc 240
taggagtgga tcaggatgac ttctgaaagg ccaaactgat taataaggga taaataaagt 300
catgcaaatg aaaaggttgt atatgtgttg ggggaaagca ttccagacag aaggaccagt 360
gtgtgcaaa gcccctgggt gagaggtgcc taatcagtag tgaatataca aagaggtaga 420
gctgggacta aaccactgtg ctccacttgc ctgcttgaat tccgattcca aggagtggaa 480
tagacttcaa atgtcttcaa gtccacttgt ttctgccaa ttctcatttt tgttccatga 540
aggcagagca ccttctttat ttcattccat gatgacttct cagcctctag aattctgcct 600
tatgatggat ttctcagaaa tatgtttgtg taatgaagac aaggacagtg gtttagagttt 660
acattctact ggg 673
```

<210> 41

<211> 447

<212> DNA

<213> Homo sapiens

<400> 41

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ctcaagcagg gctagcacct ccaatctaga gcaccctgca cttccggctc caccggtctt 60
cttgtccctt cactgccttg cctaggggtg cttctcctc ctctcttaag ctgagtacaa 120
gtgataatat agtgattaac acaatgctgt agtgttttcc tgttaaacag ggaatggttg 180
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ctgtggctga tttcctccta ttttgttttt tgttggttg ttggtttttg ctttttcagt 300
agctaccag gtatacaaat agcttctttg cagttctgat catctttagg ggccgcattg 360
ggcataattg gaataataat actagctaac ctgcttgag ggcttgctct gtgctgtgca 420
ctttgtgagc actttaataa taggagc 447
```

<210> 42

<211> 562

<212> DNA

<213> Homo sapiens

<400> 42

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ctcaagcagg gctagcacct ccaatctaga gcaccctgca cttccggctc caccggtctt 60
cttgtccctt cactgccttg cctaggggtg cttctcctc ctctcttaag ctgagtacaa 120
gtgataatat agtgattaac acaatgctgt agtgttttcc tgttaaacag ggaatggttg 180
```

```

attttccagg agaataaaaa atgaaattgt cattggagga cctcctcagt tgaaatcatt 240
ctgtggctga tttcctccta ttttgttttt tgttggtttg ttggtttttg ctttttcagt 300
agctacccag gtatacaaat agcttctttg cagttctgat catctttagg ggccgcattg 360
ggcataattg gaataataat actagctaac ctgcttgca ggccttgctct gtgctgtgca 420
ctttgtgagc acttttaaata taggagccaa acctctcttt ccaaaaagcct gaagggcagg 480
tgtcctcgca gttcccatc catagatcac catccttcca tggaaagtac tctgtggact 540
gtaacttgcc atctagactt tt
562

```

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<210> 43
<211> 848
<212> DNA
<213> Homo sapiens

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```

<400> 43
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gcatcatcgg gggccttctg ctccatgtgt accctccagt atttgcaaaa gattgaacct 120
acaagatacg ttattagggc aagtatttac atggaaaggc tctgagttct ccaagacttt 180
ggtcattttt tacaagatga tgtactacc tcatgatttg tggaatcttc ttaggaaccg 240
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ggcagagggg ttcttctctt tgtgaaaggg ttagaatggc acatatttgt aatttccaga 480
ctcatctttt ccactctca cattcactct gtatttggcc gtactaaatt gttgacagtt 540
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acattgtcca ggaattcatc cctgccatga ctgcagtgcc ccctctggga gctccccgtg 660
ccctgtgcct gccgtgtca gagcttccag catgctgggc tgtggagggt ttggtctgtt 720
tgcccaccca gcaagcctct aagctcctca aagacaccaa ctgtcacgca tatctggagc 780
agcacctggt accttacggg tccttaaatg ccggtgaaat gaatgatgtc ttctgtctct 840
ttaaaccc
848

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<210> 44
<211> 1111
<212> DNA
<213> Homo sapiens

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<400> 44
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gcatcatcgg gggccttctg ctccatgtgt accctccagt atttgcaaaa gattgaacct 120
acaagatacg ttattagggc aagtatttac atggaaaggc tctgagttct ccaagacttt 180
ggtcattttt tacaagatga tgtactacc tcatgatttg tggaatcttc ttaggaaccg 240
tgactgtgtt gcttttctga tcatgggtac agggccatct ttgttgaggc ttcccatgtg 300
tgtgggcaca gagcttctgt ggcattccag cagtagatta atggagctgt catcctctga 360
agcctcatgg gttgtgcatg caaacctggg cctgtgaact gcatgggagt ctcttaaaag 420
ggcagagggg ttcttctctt tgtgaaaggg ttagaatggc acatatttgt aatttccaga 480
ctcatctttt ccactctca cattcactct gtatttggcc gtactaaatt gttgacagtt 540
ctccaaatac aacagcattg ctattctgct gccttcgtac atgccgttta cattactgtc 600

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```

acattgtcca ggaattcatc cctgccatga ctgcagtgcc ccctctggga gctccccgtg 660
ccctgtgcct gccgctgtca gagcttccag catgctgggc tgtggagggtg ttgggtctgtt 720
tgccccacca gcaagcctct aagctcctca aagacaccaa ctgtcacgca tatctggagc 780
agcacctggt accttacggg tccttaaata cgggtgaat gaatgatgtc ttctgtctct 840
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tagcttaaaa agggaacacg gggacaaact g 1111

```

```

<210> 45
<211> 626
<212> DNA
<213> Homo sapiens

```

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<400> 45
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gataattcaa ttagtgaatc aaacaatgat aaaagctata tatttcctgc tgatttgtca 180
ggaaaatagt acactgacaa agatagcatt acctaagaat ataaaagcaa agatagcggt 240
gccacagact gcttaatgtg tgtcatctat caaaggggta tatgtgatga gaagaaaaac 300
ttgaaatgcc ctcaaagtgt tcagctatca gaaactgaaa aaactcttac tagtgtgttc 360
cgcataattg tgagcaatat tctaaagatc gacgtttctt cagttatgat tttcttgagg 420
ctacatcaga gaacttcctt aaacctgtcg gtaatacaaa atcagtgagt catggcaaag 480
gggagacatt atctatctgt tcttgactat ggaaaataat gttgcagaat ctttgtcctg 540
tgtgtgaaga agcgatgagt acaggaccag aactgtccgg aagacgtatt tcaggagacg 600
cacatggcag tcgggcgcgc ctctag 626

```

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<210> 46
<211> 185
<212> DNA
<213> Homo sapiens

```

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<400> 46
gaagaaaactg tgaggtcaca atacttttga ttcattatgt gaatatacat acacactcac 60
atctctatta ctgtatccat ctctatatac ttgaactcca tatgctctat attaacttcg 120
ccaaatccaa cccaacaaac agggttcatc tctgattttt cccccatat ttatgattct 180
cagac 185

```

```

<210> 47
<211> 268
<212> DNA
<213> Homo sapiens

```

```

<400> 47

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atggatttgc cacaagctgg ctttgaaagc agtggttagag tgtgaaagaa gttaccttaa 60
gacttccttgc cagttgcact gtaggtacga tgtactgttt gttgtgattt gactttcctc 120
caccaccccc ctgccccagg aagatgtgat cttgtgcac ttgtgttcac gcagagtagg 180
gtagttggat ctttgtcaag tctcagtgat ccacatgcgt gcacatctattt tgtcagtctg 240
cttgtccttg tatccatgtc atactgtc 268

<210> 48
<211> 108
<212> DNA
<213> Homo sapiens

<400> 48
gtcgacgacg acagcaatgc cgatccgcgt cagccccgca accggctgcg gctgcagggtg 60
atgcctgccc tgcgcgaggc cttcccgagc gcgccgctgg cgctggcc 108

<210> 49
<211> 83
<212> DNA
<213> Homo sapiens

<400> 49
gatcgagatc ggcggcgtgc cgctggtgca tctgccccgc gaggcggtgc gcgcgccctg 60
gccgctcgac gagcgcgagg tgc 83

<210> 50
<211> 475
<212> DNA
<213> Homo sapiens

<400> 50
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tagcttaagg ggagaactat gatgttaatt ctttgaaagt gagtaatgta attagaacaa 120
taacactatg agtttttcta taaacaaaat atagcaagat taagttgata acatacattt 180
ctaaaatttt ggcttcctta gagaaagcca accaaatata aaattttaca gcagagtcaa 240
gttttttcag tttggcctat attttctttg gtaacactgt tctgaatgta tatgcagtgt 300
ttatttcaca acttcctctt gaatgacctt tcaaaaatta atgattcttc acattcatga 360
ccagatgttt tctctgatgg aagcatctga tgtttgcagt catcaaataa gattcaaaat 420
gtctgtttca agcaaatcaa gtaaaacttc tccatcacat caaaagtaag gcttg 475

<210> 51
<211> 607
<212> DNA
<213> Homo sapiens

<400> 51

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aaagaaacaa gcaacaaata ggaaaatcaa attttttagaa gtaggtgcat aataggggaa 60
tagcttaagg ggagaactat gatgttaatt ctttgaaagt gagtaatgta attagaacaa 120
taacactatg agtttttcta taaacaaaat atagcaagat taagttgata acatacattt 180
ctaaaatfff ggcttcctta gagaaagcca accaaatata aaatfffaca gcagagtcaa 240
gttttttcag tttggcctat attttctttg gtaacactgt tctgaatgta tatgcagtgt 300
ttatttcaca acttcctctt gaatgacctt tcaaaaatta atgattcttc acattcatga 360
ccagatgttt tctctgatgg aagcatctga tgtttgcagt catcaaataa gattcaaaat 420
gtctgtttca agcaaatcaa gtaaaacttc tccatcacat caaaagtaag gcttttatatg 480
gttcacaagt agctatatga aataaacaga atttaaacga tottaataat ttttttcttt 540
aaacaagggtg acaaaaataac aatgccataa tataaaaact cctcattaat gataagtgtc 600
agatgga

```

<210> 52

<211> 590

<212> DNA

<213> Homo sapiens

<400> 52

```

ctcctcatta atgataattg ctagatggac accatgtaaa gtatggaaaa tgcctgtctg 60
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gatgttttga tcagagtttt tagaaaatft ctaggatctg ttgccttttg acttttagagc 180
ttcttgagag cacatgtcag tactaaaacg ttttcttaag cctctgcttt ccatagcaaa 240
aacatgttat gtccattatc cacctaactc atacttaaaa acaacacca agatgtctcta 300
ttttgttttc aaagtcagag aagaaaatag aggggaagta tttttatgtt cttttcctg 360
aattgggtcga agctagttag ttcaaaaaag atacaaaata tggaatacca cctattttat 420
ttcctggcaa ctgtttcatt caaatcatag agtaacatat gatttactac actcctttat 480
gaatattaat ctctgtatctt cacagaatga cttaatatca ttgatcagct agaacatcga 540
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```

<210> 53

<211> 217

<212> DNA

<213> Homo sapiens

<400> 53

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agtctgctaa ctcatccag tggttttttc caactgcac tcagttatct tacatagact 60
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ccctcaacca catccctgat gaactttttgc cagtgccggg aattaacaat atcacaaggc 180
tggtctgatt gtctgtatft ctcagtgttt gtttagag

```

<210> 54

<211> 430

<212> DNA

<213> Homo sapiens

<400> 54

```

aataaagata agaatgacaa cagatttctt tttgggaaca atgagagtgg gaagacaatg 60
agcaacatct ttaaagtact gaaaggatc agcagaccca tgctacaaaa aatgtaaaag 120
aacatcatca ggcagaagga aaaaaatagt atcagattga agtctgttct acacaaagta 180
atgaatacca gaaatgataa ctacctgggt aaatatataa gattattttc ttcttattta 240
aagtaagagt gagattctta tcaacaatag cataaaggct gaaggggaga aatggaagtc 300
tattagtgtg atcttataca tgatgtggta tgatgtcact tgaatgtaga attataaaga 360
taaacagcat aaactcttaa agcaaccacc aaaataacaa agagttataa ctaataattc 420
agcaaaggag                                     430

```

<210> 55

<211> 2956

<212> DNA

<213> Homo sapiens

<400> 55

```

gttgtgtgtt ttttttttga gacagagtct tgcctgtctg tctaggctag agtgcagtgg 60
cgccacctcg gctcactgca acctccacct cctgggttca agtgattttc ctgcctcagc 120
ctcccagagta gctgggttta cagggtgctg ccaccacgcc cggctaattt ttgtttcttt 180
agtaggggtt caccgtgttg gccaggctgg tctcgaactg ctgacctcgt gatctgcca 240
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ttttaacttt gtatacggta ttttcttttt ctgtatagaa gtcaaactat tttccttcat 360
ggattctggg ttttgtctct tcattccaag accatttaaa aaaatgtgtt cacattttcc 420
tctgatactt ttaagggtgc tttctgaaga taaaacctga tgtgtctgca atgctagagt 480
gaggcttgag tatgggcaag ctctctgagt gcacgtgtga gctgaggaca gcatggcgtg 540
tgaggaagga tcagtcacac cagctcatgt aagctcacga gagaggctac tggcttccact 600
gcacgtgtct actgggtgtt ttgacaacgt ggagtgaata cttcatgtcc tcacaaattc 660
aaatgctgtt tttatcatgt ataaatatta tattggaaaa aaataaaatc ataatgaagt 720
tatttgcctc cttatcttga agaaaaacac atacatgttg cacttctgaa ttaccttaa 780
cctgtttaat acctactgag aaagtctact attcagaatg cagaaaaagg tggaaggagt 840
gggttagggc ctaaaagtca aactgggtcc ccgcagccca gagatcaaca ttatttaaaa 900
actcaccatg caaagctaag agagaacgaa ccatgtaac ctttttgaac tattacattt 960
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agaataaaga caccaacctc ttttgtcatg aggctcaaag tctcctctgg ataccgttct 1680
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```

```

atcaaggaca ccaaagaaga aagcaatggt caatgtatcc caatatccat aaactatgat 1860
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aactaccact ttacaccaac aaacaccagg tacagttttg tatctatcct ggagccaaat 1980
ccttccatta gagtgcccat tctgcatgaa gcacagtttg aatcctgggc tgggaacata 2040
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```

<210> 56
 <211> 517
 <212> DNA
 <213> Homo sapiens

```

<400> 56
cctggctgga gcggacacgg tcaagaccgt cctccctacc ttctcccttc aaccaagct 60
caactcaacc aaaaatggcc cctctgtccc catgcctgat aggaaagtca ggggaaagtc 120
tgtccgatta ctgtcaaaga agacaggagg taagggtcag agtggaccac tgactgaata 180
tgagtcgcag aagtgttaga ggcagaagtc cagggccatt tccttaatat cgaagtgtct 240
ctgctggagg tctgggatgg atttttgccc tgcatttaga agttctgggg tcctgggaga 300
ggggagagaa gcccaatagc agaggagaca gagtgtgggc ggggcgagcc ggaggggtgc 360
atcctgggag agcaccaggg tgaggaggag gtgaagatga gcccgcgcag ggaagcgctg 420
gcgagtgtgg gaagtcacct gccctcggc ctgtgagctg ctctgcttgg agtgactaag 480
gctcgggagg tccaggctcg gccagaggca gctcata 517

```

<210> 57
 <211> 1490
 <212> DNA
 <213> Homo sapiens

```

<400> 57
ggggaaccag acgccagtc acaggcgaga gccctgggat gcaccggcca gaggccatgc 60
tgctgctgct cacgcttgcc ctctggggg gcccacctg ggcaggaggt aagtcagtgg 120
ggctctgcct caatctcccc tgcctccctc caggagagcc aggactcac ccggcccttg 180

```

```
tcccagacta actctggtca cagaaccatc ctgtctgctt ggaggggagg ggtccctgt 240
tctggcagag gtcaccccca tatcacgca tggggatttt cttccctttg ggtctctctt 300
ttcttcagag atgtatggcc ctggaggagg caagtatttc agcaccactg aagactacga 360
ccatgaaatc acaggggtgc ggggtgtctgt aggtcttctc ctggtgaaaa ggtgagtagg 420
gctatggtca tgggcccagc gccatgtccc ctcccatccc acagtttcag gaactcaggg 480
cagcgggtaa gcacccgtgg ccacttttgc cacacatgcc tggctactgt cgatgcttcc 540
tggctcccg c gatgcttcc tggctggagc ggacacgggc agaccgtcct ccctaccttc 600
tcccttcaac ccaagctcaa ctcaacaaa aatggccctt ctgtcccat gcctgatagg 660
aaagtcaggg gaaagtctgt ccgattactg tcaaagaaga caggaggtaa gggtcagagt 720
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cctcaccagg atctcagtga ctctcccaa aagtcacacc cactttgcag acggggaaac 1200
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gggttggtga ccagtga gctgtcagag acccaaagtc tgatggtgct ggactctctg 1320
catcccgagg agggagatgg gggcgctgag gaccgggat gtgctgggac atccagatc 1380
tgagcgtcca aagctttgcc tctctcccag tgtccagggt aaacttggag actcctggga 1440
cgtgaaactg ggagccttag gtgggaatac ccaggaagtc accctgcagc 1490
```

```
<210> 58
<211> 436
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> unsure
<222> (197)
<223> a, c, g or t
```

```
<220>
<221> unsure
<222> (432)
<223> a, c, g or t
```

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<400> 58
ctctgtctcc tcataggaat ttcttagttt cttggctttc gaatgtgact caaccctcc 60
cttggcctgt ctgtctgctg tgctgctttt aggttctgct gccacggcta actatgtttc 120
cctgtgtttc cagataaact tgtgaggggc agaagctgac agaccaagct catttttcaa 180
gccaatctgt gtcatanaga gaccacgggt tttccttggg ttgggtcctt ctacctggtt 240
cagtcagctg tgaacaaaac ttgtggaatt tggatctgat ccttaaaatg gagatacagag 300
agatcaccat ggctggcgtg aaactagttc tggatctgat tgtcttttca attgtttgtc 360
catcaggtga accactctg aagggaactt tggtaacatt ttcccaaaa taaagatcat 420
taattaatta tnaaaa 436
```

<210> 59
 <211> 458
 <212> DNA
 <213> Homo sapiens

<400> 59
 ctctgtctcc tcataggaat ttcttagttt cttggctttc gaatgtgact caacccctcc 60
 cttggcctgt ctgtctgctg tgctgctttt aggttctgct gccacggcta actatgtttc 120
 cctgtgtttc cagataaact tgtgaggggc agaagctgac agaccaagct cttttttcaa 180
 gccaatctgt gtcatacaga gaccacgggt ttcccttggg ttgggtcctt ctacctggtt 240
 cagtcagctg tgaacaaaac ttgtggaatt tggtcatttt ccttaaaatg gagatacgag 300
 agatcaccat ggctggcgtg aaactagttc tggatctgat tgtcttttca attgtttgtc 360
 catcaggtga acccactctg aagggaactt tggtaacatt ttccccaaaa taaagatcat 420
 taattaatta taaaaaaaaa aaaaaaaaaa gagcggcc 458

<210> 60
 <211> 359
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (336)
 <223> a, c, g or t

<400> 60
 cggacgcgtg ggaaacacaa actgcatcat ccaaaaatac acctttggtc cacggatgcc 60
 actggaagac atctgaattt tagacctcca gagagaagat ctgggtggct agctccagag 120
 tggaggcatg cttgcttttt ctttacactt gtgaagagga atggatccgg acatctgcaa 180
 tctgggtaga ggacggcagg cagcaagctt agccactcgg ccaggcttct cagcccttac 240
 tctagacatg tgatccttcc tccacgtgat ataactcaca actttcttac ggctactcaa 300
 ggcaccccaa gttaaaagga aggtcagatg tgattnatca ctttattatg ataaaaaaaa 359

<210> 61
 <211> 932
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (161)..(180)
 <223> a, c, g or t

<400> 61

```

tggccagaga catatgaaaa gatgccttag acatatagca tcttttctca tccacttact 60
aggagaaatg ctactaaaa ttatcctgta atgccattta aaaaaatctc agattgttga 120
agtacaaaaa gttagataac atattatcaa ccaaaatgtg nnnnnnnnnn nnnnnnnnnn 180
ttggggccagc tgtgttttggg taaactagtt aagggtggtag ggttggttgg tcaggaatta 240
aatcataaag aaaaacaaaa cctctgaaat gaaaactcat ggtgagggta aaacttcacc 300
ccttgtagtc acttatgttt aactggtcta ctggattttt ttaaagggtta agaaaacaca 360
aactgcatca tccaaaaata cacctttggt ccacggatgc cactggaaga catctgaatt 420
ttagacctcc agagagaaga tctgggtggc tagctccaga gtggaggcat gcttgctttt 480
tctttacact tgtgaagagg aatggatccg gacatctgca atctgggtag aggacggcag 540
gcagcaagct tagccactcg gccaggcttc tcagccctta ctctagacat gtgatccttc 600
ctccacgtga tatacttcac aactttctta cggctactca aggcattcca agttaaagg 660
aaggctcagat gtgattctca ctttattatg ataaaaaaaa ttactattta aatactataa 720
ataaatatta taataaatac taagctagaa ccatcagaat acatcacttc tgtatccagt 780
tttcaaagta tctttggtgt ttgtcaggaa taaataaaag taatcatttt atttctatta 840
aattatatct ggcactagtg gctagtactt ttgtacttat tagtacaacc ttaaaaagtc 900
ttaaaaagat ttcttttggg ttcagaacat aa 932

```

<210> 62
 <211> 554
 <212> DNA
 <213> Homo sapiens

```

<400> 62
ctggcagatc cggacgggca ggactgggtg tgtcccatga gagcacctcc ttcctggcct 60
ttcctgtgga ctttgtccca caccactgc ctgggttctt tccttttagtc acttcagct 120
ccaggcacag cagttggtga ctccttgggt ggagccgtgt cccaccgggt cctgatactg 180
ccgtcttctc tttcacagtc ctccaggctt gggccagcct tgggggcagc agagcttctg 240
gggtgagtgt cgagatcctg tgtcctgaga gcggtagtca gggagagggc tggtcggggc 300
agggctgccc gggcaggaca caggatgcgg ccggccaggc tggggccaag gtgttcagac 360
ctggactttg ggctcgtgct ttcttcatgg ttgcgccttg ctgctgtcc cttggagtct 420
tcatttggtt ttgctttttt tgtttgtttg ttttcacctt atttttgcca gacttaagct 480
agttttgctg ccttttgaaa ctagtggaaag aatcatttta tttcctgggg ataatttggg 540
ggcttttgaa tcca 554

```

<210> 63
 <211> 786
 <212> DNA
 <213> Homo sapiens

```

<400> 63
ccagtggcct gtgtcctagc aaatgagagc caccctgaaa aataaaatcc tgtctcccca 60
acgccagccc tggcaaggca ccagaaactc tccggaatgc ttgaaggcag ggctggcct 120
ttccatgggg tccagggtctg tggggctcct ggcggtactg tgggcctgca gagcggggca 180
tgtgggctga agaccgtctc ccaccatgg tgggaaggga caaagggtgg ccctggcaga 240
tccggacggg caggactggg tgtgtcccat gagagcacct ccttctctggc ctttctctgtg 300
gactttgtcc cacaccacct gcctgggttc cttccttttag tcacttccag ctccaggcac 360

```

```

agcagttggt gactccttgg tgggagccgt gtcccacccg gtcctgatac tgccgtcttc 420
tctttcacag tcctccaggc ttggggccagc cttgggggca gcagagcttc tgggggtgagt 480
gtcgagatcc tgtgtcctga gagcggtagt cagggagagg gctggtcggg gcagggctgc 540
ccgggcagga cacaggatgc ggccggccag gctggggcca aggtgttcag acctggactt 600
tgggctcgtg ctttcttcat ggttgccgct tgctcgctgt cccttgaggc cttcatttgg 660
ttttgctttt tttgtttgtt tgttttcacc taatttttgc cagacttaag ctagttttgc 720
tgccttttga aactagtga agaatacatt tatttcctgg ggataatttg ggggcttttg 780
aatcca 786

```

```

<210> 64
<211> 575
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (411)
<223> a, c, g or t

```

```

<400> 64
ggcacagcta gttggtgact ccttggtggg agccgtgtcc caccgggtcc tgatactgcc 60
gtcttctctt tcacagtcct ccaggcttgg gccagccttg ggggcagcag agctttctgg 120
gctgacatgg ggctcattgc tcctttctcc aagccctctg agggacatca aaagcgtggg 180
acgcatccac ttttccacca tcttggtctg cccactgtt ccctccatcc tggagggcct 240
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tgacatcctt caccctgcc cccatggcat gcatgatcca ttagggagga ccgtctgcac 360
aaaggctctt tgccctgtgc aagcttccct caagactgga cttgcaaaag ntccagcctg 420
tatggctgga gttcccatg cctgccaatc tcctgtcgac tgcgagtcag ctccgatact 480
tcaccagatt cagccacctg ggggagctgg aagtgaatct cctcgtagct gagccttctg 540
atgagactgc agccccggct gacacctgga ttgca 575

```

```

<210> 65
<211> 834
<212> DNA
<213> Homo sapiens

```

```

<400> 65
cagcagttgg tgactccttg gtgggagccg tgtcccaccc ggtcctgata ctgccgtctt 60
ctctttcaca gtctccagg cttggggccag ccttgggggc agcagagctt ctgggctgac 120
atgggctcat tgctccttct ccaagccctc tgaggacatc aaaagcgtgg acgcatcact 180
ttccaccatc ttgctgcccc ctgtccctcc atcctgaggc ctcttaagca catgtgtggg 240
gtggcaggca cactgctgat agctgtggat gcggccgtga catccttcac ccctgcccc 300
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ttcctgcaga ctggacttgc aaagtccagc ctgtatggct ggagttccca tgctgcca 420
tctcctgtcg actgcgagtc agctccgata cttcaccaga ttcagccacc tgggggagct 480
ggaagtgaat ctctcgtag ctgagccttc tgatgagact gcagccccgg ctgacacctg 540

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gattgcagca ctcattgaaag accctgagca gcaggaccag tttggcagag cccgaattcc 600
 tgaccacacag gaactgggag ataaaactct gtgggtttta tcttctcatt ttagagtgtc 660
 cagtgtccat gtgggtgtgaa cacgcttcat tcaacctggg cccttgggag agatgctgag 720
 tgggtcccg gctgtcccca ctccacacca tggcagtgaa gagctgctga agtacatgct 780
 tcatagtccc ttgcgtctcc tctatgagta cagttcctgt ttgtggagta gcaa 834

<210> 66

<211> 437

<212> DNA

<213> Homo sapiens

<400> 66

cgagaaagaa aaggtatagc tttaaagtggc ttttgagcag gcatgagttt atggaaccaa 60
 ggattcctgt gaagacattt tcttttgata aaagaatatt gataagaata ttataccaaa 120
 ttgaacaaaa gtagccacag tatgaaggat tcagtacatg gccaaataac ttatttcaaa 180
 atagttttaga gttatatattc ttgaagacgg aggttggtatg gggattaaat tttgtaaaga 240
 cgccaatggc tggttaacaa aagagctgag atggatgtgc tcttgaatta aaaataaaaa 300
 tatttttaaat atactattac atcataaaca ttctatgtct ctacttttcc atctagaagc 360
 aagaattctt tagtactttc cgagcatcta ctgtgtagac tatcttgtgt tatgaccaat 420
 tgcttatatt tatttac 437

<210> 67

<211> 80

<212> DNA

<213> Homo sapiens

<400> 67

acaaaaccat atgcttcaac acctcaggtt gaccatttgg ggggagtgtg tatgggtgtt 60
 ttaagatggc ggggtatgcc 80

<210> 68

<211> 663

<212> DNA

<213> Homo sapiens

<400> 68

gtgtagagca tggaagcagg gagaccagtt aggagtctat tgtaatagtc ctggtgagag 60
 accacagcgg cttggactaa gatggcaact aagataatga tggttgcagg gccctcttcc 120
 aatggaggca ttgccagcct tctggccatg aaggagaaag tgatttcaac taaccaggga 180
 aactcttacc tctaaatgga gatacttctt gataacagaa gaaactgggc atctaacca 240
 gaaataccag ctgagtagga gaagagaaaa ggcacagcc agtcaagggt tcagaaggct 300
 gccaacagtc tttgtaagcc accttgggag tagatgagaa cggcaatcaa tcaacatggt 360
 ttggtgaaca aaccatatat tacaaagtgc ttctgtgaag tctgcatcct cacaactaat 420
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 cctgggttca ggtgattctc ctgcctcagc ctccacagca gctgggatta catgcccacc 420
 tattttgtac ttc 433

<210> 76
 <211> 334
 <212> DNA
 <213> Homo sapiens

<400> 76
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atggtgttta tcttttctgt gctgatttgt aaaagctatt ttaaaaccct tcatctgcca 120
tataatgttac atttctttcc tgctttctgc caccttccaa tttgttacca actttcttct 180
ccaaccttgg gccactggca tatacactca ttttaaatat cagaacttgt agtgctcttt 240
gaaatgcaga cagactatgg ttcattctgc aactgcatat tagttaacag gcaaaaatac 300
cttagtaaga gaaagtgtct tttccttcta atgt 334

<210> 77
<211> 547
<212> DNA
<213> Homo sapiens

<400> 77
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ggaattgtcc tatatggttt taaaatacac ttgctatagc acaataataa gtggtttagt 180
ggtgactgct actcctgtga gtttggttta aaaacagccc agtttgtacc ctggttggtca 240
tgataaaaagc ataccaccct tactttgaga attttaacca tagagcacia tatgtgtcaa 300
acaagctaaa aaagtattct tttcagttgc attttgatgg acattgaaat tgcttagact 360
ctttgaccaa aagtacaaac tgctgttaaa ctggtgacaa aatctgtttt catggacgct 420
aggctactta agctttattt tcctcctaag cattctctgc ctttgtaaag cactctagca 480
gcagtatttg cttagcttct aattttgggt ttgcttttgt gttttctctc tttctcttgg 540
ttgttcc 547

<210> 78
<211> 263
<212> DNA
<213> Homo sapiens

<400> 78
tcgaggggtg aaatgagtgt cattagccaa gtgacattta agtgccttgg tttgtctgct 60
tgcttttctg tggattgaaa aaaactgacc actgttaata tgattgtaca gtgacactgg 120
aaattatgag atgtgtgtct ggtagtct gcttgatatt cagttgagat gcataccaag 180
tctgataatg cagagctttt ccatttcatg tgtctgttta ccattttcat gatcttaagc 240
aataaacatt tcttgacaac agc 263

<210> 79
<211> 765
<212> DNA
<213> Homo sapiens

<400> 79
gcgggaagag cacgcagccc tgcgagtact atttccgcgt gtaccactcg ctgtgcccc 60
tcagctgggt gagtccgcag agggggcgcc gggccaggcg tgtgcagggc tcggccgagg 120

```

ctgagccggc gtcgcgtcc ctgcctttct gcttcccagg tggagagctg gaacgagcag 180
atcaagaacg ggatttttgc cggcaaaatc tgactgcccc agcgcggctt cctctgaaga 240
tgcagtgate ctgcatcttt ttgtctcgcg gagccccggg tctcggttat ccaccctac 300
ctcccagtggt ctaagccacg aataatgcc aagccttcg agttccttgt ttcccttgc 360
ctgggtctcca cgtgtatgat ggggttctca gcccaggct tcgaccagag gaccctctgc 420
caccaccgtt tcttcctgtc cttgagctac cttggtgaac tcatgacccc aggccctgc 480
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cagccagctc ctgtctgtat gggcgagatg actgagagcg cccacgtccc taaggctgtc 660
ctgaccctcc atgctgcgac aaggacaggg aatggtcggg cactatgggc ctgggtgtctc 720
ccctcccca ccaccgggtg ctgccagct caagccagaa gtgac 765

```

<210> 80

<211> 162

<212> DNA

<213> Homo sapiens

<400> 80

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cgctgcctca agaccaggac ccgccgctgg aagagcacgc agccctgcga gtactatttc 60
cgcgtgtacc actcgtgtg cccatcagc tgggtggaga gctggaacga gcagatcgaa 120
gaacgggatt ttctgcctgt gcaaacatct tgacttgccc ca 162

```

<210> 81

<211> 986

<212> DNA

<213> Homo sapiens

<400> 81

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agcgggctgg gcacgacggc tcccattggc tggggctcgg gcgtcctagc caatccggcc 60
gcggggtgcg tttctcctga cccgggtggg accgcacccc gcggactcag aagcgagcgg 120
caccgcggga ccatccaca gcagatccag tggccgcaa cgtcaggctg gagttgcctc 180
cttcgtggat gttggatgtg gaagcccagg agcccccaa ggggaaatgg tcgacgccgc 240
ccttcgaccc gcgcttcccc agccagaacc agatccgtaa ctgctaccag aacttctctg 300
actaccaccg ctgcctcaag accaggaccc gccgcgggaa gagcacgcag ccctgcgagt 360
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cagatcaaga acgggatttt cgccggcaaa atctgactgc cccagcgcgg cttcctctga 480
agatgcagtg atcctgcac tttttgtctc gcggagcccc gggctcgggt tatccacccc 540
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tgctcgtggg ctccacgtgt atgatggggg tctcaggccc aggettcgac cagaggagcc 660
ctctggccac caccgtttct tcctgtgcct tgagctacct tgggtgaactc atgacccag 720
gccccctgct ccaccaggat gtccccagg gtccctgccag ctgggaagtg ccagcatgaa 780
cgcctccaac ttcgtggaag ccagggtccc tgcagctgag ggacgccaag cagacacacc 840
tgccctcccc agacagctcc tgtctgtatg ggcgagatga ctgagagcgc ccacgtccct 900
aaggctgtcc tgacctccat gctgcgacaa ggacagggaa tggctcggta ctatgggcct 960
ggtgtctccc ctcccccatc aaccgg 986

```


<210> 82
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 82
 aacccaagat gactcgtctt ttggtgggag aattcactct gttcatgttt catttaacaa 60
 ttgatctact gtacttaatt acctttggct tattttacat ttattgggtt atcttgtgtt 120
 tttcttccct ctgatctggt tatcgatttc ctttttcttc ccctgttgca ctttccattt 180
 cattattggc agctgtccct tctctggggg tcctaataca acacatattc tttagcacat 240
 gcctcgatgg ggattctttt cgcagcaccc tcatctggag ctcacagaac ctgtcactct 300
 gtaggttctg gtcttttttc agcttaggaa catctatttg ttgcttgatt tgattattgt 360
 tagtttggt 369

<210> 83
 <211> 923
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (354)..(565)
 <223> a, c, g or t

<400> 83
 aacccaagat gactcgtctt ttggtgggag aattcactct gttcatgttt catttaacaa 60
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 tttcttccct ctgatctggt tatcgatttc ctttttcttc ccctgttgca ctttccattt 180
 cattattggc agctgtccct tctctggggg tcctaataca acacatattc tttagcacat 240
 gcctcgatgg ggattctttt cgcagcaccc tcatctggag ctcacagaac ctgtcactct 300
 gtaggttctg gtcttttttc agcttaggaa catctatttg ttgcttgatt tgannnnnnn 360
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
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 nnnnnnnnnn nnnnnnnnnn nnnnnccctg gataggaagg gataggaaga gactacttgg 600
 tgccatgggg taggggtgag ggtataagta gatcagagtg ggaagacctc agccttgggt 660
 ggcttgtctc tgcttcttgc cagggtgggag ggctgtcca cacctggatc cccgtaccac 720
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 ggaggatggg gaaccatgta tttcagtga atatttaata tatttaaata tcaataaaaat 900
 caaactcttt gtaaaaaaag ccg 923

<210> 84
 <211> 338
 <212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (12)

<223> a, c, g or t

<400> 84

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gtagttaaat ctttttgga agacatgact ttaaggagat tccctgcttt gtgacagggt 120
gctccatgct gtcttgggga caagggcctg tactgccttc aaatctgggc tcacccaca 180
ttttggtgag gggaagatag ggtgggggga taaggaggag aaaagactct agcttttttt 240
ttctatgcat gatatactgt gtgggtttat caagagtgtg gacacagttg ctgttctcaa 300
ataataggcc aaataaaatg cgattctttt tttctttg 338
```

<210> 85

<211> 436

<212> DNA

<213> Homo sapiens

<400> 85

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gtagttaaat ctttttgga agacatgact ttaaggagat tccctgcttt gtgacagggt 120
gctccatgct gtcttgggga caagggcctg tactgccttc aaatctgggc tcacccaca 180
ttttggtgag gggaagatag ggtgggggga taaggaggag aaaagactct agcttttttt 240
ttctatgcat gatatactgt gtgggtttat caagagtgtg gacacagttg ctgttctcaa 300
ataataggcc aaataaaatg cgattctttt tttctttgaa acacacagaa cagcccagct 360
ataaaacagg caactgagga agaaccaaac cgcataccgg caagactcta gcatgtcaag 420
gtcaaagact ctccag 436
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<210> 86

<211> 462

<212> DNA

<213> Homo sapiens

<400> 86

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agactgtagt gttcaaaatt ctttttagta agagaacctt ttttttctga actttttaca 120
accatctcca aattataaaa cataagactt ttttttagta aaaatatatt tttttacaag 180
cacagtggct tgcacatgg aggggagagg aggtgttttg tccttgagc tgctggcctg 240
agagaacctt gtcacgtgg gagctgggcc attcctacac agtggctctg caatgacctg 300
gtggtggtgg aggcctgtga gtgggcactg gtaatgggaa cagctgtaaa accctggagg 360
ccagccccag gagagtgacc ttaccagga aagttctggg aaacaaacca cagggagggt 420
ttacaggaat ttttggttgt gccacaggc aaggcacatg ag 462
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<210> 87
 <211> 1435
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (1012)..(1119)
 <223> a, c, g or t

<400> 87
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 ggggacttta actgggagga ctactctggc tttgatttct ccatcatgcg gagattgggc 180
 tttggaagtt gtagcttcca gagaccttcg atgtttgcta acatgtccaa gctctacatt 240
 tattgattgt tggttctgtt catggctatg ttcaaattct tgtacctttt tgtcctccac 300
 agttttctgt ctcatccctg tcttccacct ctgctccccg ctcttgtctg gtctaattaa 360
 ctctctctgt tggagcagct tccccctctt ggtaaactca gacatgaccg cagcaaagca 420
 gcgtggaatc ttctgttttg tcagtgttcc cccagcttc cccgcagata cagctgcatt 480
 ggagcccctg aagacaaacc agagaagtgc tgcaccttg ggggcaggag gctttgcttt 540
 gccagggtc gggctcctga atgaattttg gtgcagcctt aacggccgag ttgtgctgtt 600
 gaagggtgcac tgctctgtgt ccaggcactt catggagggg agaggaggtg ttttgtcctt 660
 ggagctgctg gctgagaga accttgtcat cgtgggagct gggccattcc tacacagtgg 720
 tctggcaatg acccggtggt ggtggaggcc tgtgagtggg cactggtaat gggaacagct 780
 gtaaaaccct ggaggccagc cccaggagag tgaccttacc aggaaagtcc tgggaaacaa 840
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 gctctaagtt tcttcttctt gtcggacagg aagaaatggg gttttatgca tnnnnnnnnnn 1020
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 1080
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnc ttctgagggg agactgagat 1140
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 tgtggggagc ctcatctaga ttggaggatt gtgaaagtca agagacagga gagtcaaggt 1260
 gaggaaggt gagtaagagc tatccaggca aagactgctt ggtaggggag tgtcccagca 1320
 acgggaaaca acctggaaaa aatatgacac ctcaggggaa ctaaaagcag ttgtatgtgg 1380
 ctgatgcaca gacaggaag ggcaggaagt gtgctgaaag aaggcaggag gagaa 1435

<210> 88
 <211> 459
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (437)
 <223> a, c, g or t

<400> 88

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cttgaaccat ctgggggatt ccaactagta tcttttagctc ctgacatgag ctgttctact 180
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aaaagtccat gcttccggga atcaggaagt cgcctcaagg caaaagtagc tgagtgtttc 360
tatactctgt ttgttttctt ttctaacttc tctttttggt gggtaattct tcaccatctt 420
gttgattctt taagtcttag cataacacac attttaaaa 459

```

```

<210> 89
<211> 1263
<212> DNA
<213> Homo sapiens

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```

<400> 89
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cttgaaccat ctgggggatt ccaactagta tcttttagctc ctgacatgag ctgttctact 180
gtgggctcag cccttgtctg agactgtatc cctatagggg cccgggtcttc tgttgacccc 240
tcaccttctg tgggcctggg gcatggacct ctgatccttc catctgaaga agctgtcaaa 300
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ttgttgattc tttaagtctt agcataacac acattttaaa aatccagttg ttttagttgc 480
tttctgtctc catagaagggt caccatgggt ctcagccctg tcggacctgg agcctggtac 540
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cttaggtgag tcaaggctcg aaaagcttga gaccctgct ctaggggctg tacctgtccc 660
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caagtagctg acaatcccca ggacctgtgg gctcagacac agggccctgc acctctcagc 780
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cctgcccacc ccgagtctgg tgagggtagc aaaaaacata aagtggaatt gataaataat 1140
ataatctatc catatccata tttttatttt ttattatttt gggacgaagt cttgctctgt 1200
cactccagcc tgagctacag agtgagaccg tgtctcaaaa aaaaataaga aaaaaaaaaa 1260
aaa 1263

```

```

<210> 90
<211> 554
<212> DNA
<213> Homo sapiens

```

```

<400> 90
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gtaaatacat ttatttcaat tcctttccta cataggggaa gaaacagagg ctgcaaaaga 120

```

```

tttagttagt tcaagaaaaa acagtataat ttggagtttt tgactttgtg agttttgtta 180
cggcgctgac attcattctt ttgtgcgttc agtgtattca aatcttcaaa tctagagcac 240
attgtatgct gggcagaagg cacagtactt gaggattcag tggacagtga tacagaaaaa 300
gctgctgtcc ttgggcactg atgagcctcg ggctactaca agtaagcagg cagtggcagt 360
aggtggaatg agggctgcag gtcctggcat catggatacc aatttgggct tagaatggaa 420
gcggaggctt ccttgaagaa cagcggctta agctgagact tgtaggaata gtggtaatta 480
acaaacagac aggaagaaga gctttccagg aagacagcaa aacataggca aaggctctgga 540
gaggagagag agca 554

```

```

<210> 91
<211> 435
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (406)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (411)..(412)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (421)
<223> a, c, g or t

```

```

<400> 91
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gaaaactttt gagaaggagg acaaagcaga cggaacctaa tctctgaaca atttcaatta 120
catcttttac aagtggctgt tggctagtca ttaaaaaatga gccattcaca cttgtggaca 180
ccttttttgc catgcagact tgacttgcaa agcctttatt atccctgggt aagaacagca 240
cagctaataa aaacgaatca tatggcttta aactacttgc atccaacagg gacatcctaa 300
aaatgggtccg gatagtgact tcatgaccat ttaggctgca agtgccatag ttactaatga 360
gaacagatat ttccaaatgg cggcaataga ttatggaaaa tggagnaagg nnagagagta 420
ntttactttc agcta 435

```

```

<210> 92
<211> 580
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure

```

<222> (551)
<223> a, c, g or t

<220>
<221> unsure
<222> (556)..(557)
<223> a, c, g or t

<220>
<221> unsure
<222> (566)
<223> a, c, g or t

<400> 92
aaaaaaactg tttagaaaac cttcatatatt actctcccggt tcaaactatt ggccctgatt 60
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taaaatttgc ctttttcttt cttattatta gtccataaag gctatttcta gtattaaaca 180
atgcttaaga atagcttgga tccatgaaaa cttttgagaa ggaggacaaa gcagacggaa 240
cctaactctct gaacaatttc aattacatct tttacaagtg gctggttggt agtcattaaa 300
aatgagccat tcacacttgt ggacaccttt tttgccatgc agacttgact tgcaaagcct 360
ttattatccc tgggttaagaa cagcacagct aataaaaaacg aatcatatgg ctttaaacta 420
cttgcattcca acagggacat cctaaaaatg gtccggatag tgacttcatg accatttagg 480
ctgcaagtgcat catagttact aatgagaaca gatatttcca aatggcggca atagattatg 540
gaaaatggag naaggnnaga gagtanttta ctttcagcta 580

<210> 93
<211> 724
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (297)..(602)
<223> a, c, g or t

<400> 93
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aagtacactg aagaaatgtg ttgaaaatct atgcaaccat tttcgcatta tgtactagca 180
aataaacaat ctttaatttc tggaattttc cattttcctc agtgatattg ttgattgatt 240
tgtagttttc tttctttgct aggtttcagt atcagggctg taccaatttt tttctttnnn 300
nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
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nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
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nntgtgccat ctttatgaag tgaattatga agctttccaa tcttttttat tttgtagaac 660

agtttaaata cacaacaata tactaagttc ttagattgaa gctgttttta aatcacaaag 720
acag 724

<210> 94
<211> 586
<212> DNA
<213> Homo sapiens

<400> 94
ctaagacagt ggccaatctg actgtgaaaa taagggcagg ctacactgga gagcagggat 60
agggacaccc ggggggacaga gatgtgggtc accttagggg aggacacact caggaggccg 120
gcccattgat gcacatgaag gctgggagca cgggtgctca ggatcagctc atcagggaac 180
ttgaccaaatt ttagagcaag gccctttgat agtgtataga gatgtttgtt ctaagcagca 240
atagaaagct tctggaatct gttccattaa gaggtgatag aaacaaaata tgagtcgttt 300
tggagttgtt ttcagcagag tcacaatgat agcaccatta tagatatattt acagacataa 360
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cccaatatgg taattcgtga actcttagga ggccagaaat atcctaattc tgtgcaaggc 480
agggaccctt ggactgtaac tgtcttgtct gcttttggtc gtgaaggaga ctcagaggcc 540
caaacaagaa tttaggaaaa agagcaatag gattgtgttt aaaaaa 586

<210> 95
<211> 491
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (480)
<223> a, c, g or t

<400> 95
aaataatttta acctaggaaa agaaaaagaa aattgaaaat tggagctaaa ataatttgat 60
ttttccctca acagggttat tggctgtctt ttaagtgact aaaagagcgt atctttatgt 120
gaatttttagg catggtcata tgattaatac aaggataaag caaccaaatg ctctcagtat 180
ttattcccggt gctatttgtc tgttttttag ttcattggagt attgtattgt acttggtaat 240
ttgatgcttt tgagatgtcc ttttagacaga tttttaacta caggacttcc tctgtagaat 300
cgacaatgtg tttcactctc tgtggcattg acaatgtttt tgaatgccta attgttcagt 360
agaactccgt gggtattatt acaactttgt acattattat aaatatttta tattagttgt 420
atattccact gcagatagca accagaaaac taaaatacag aaatattaca tattagaggg 480
gattataatg g 491

<210> 96
<211> 634
<212> DNA
<213> Homo sapiens

```

<400> 96
aaataatttta acctaggaaa agaaaaagaa aattgaaaat tggagctaaa ataatttgat 60
ttttccctca acaggggttat tggctgtctt ttaagtgact aaaagagcgt atctttatgt 120
gaatttttagg catggtcata tgattaatac aaggataaaag caaccaaagtg ctctcagtat 180
ttattcccgt gctatttgctc tgttttttag ttcatggagt attgtattgt acttggtaat 240
ttgatgcttt tgagatgtcc ttttagacaga tttttaacta caggacttcc tctgtagaat 300
cgacaatgtg tttcactctc tgtggcattg acaatgtttt tgaatgccta attgttcagt 360
agaactccgt ggttattatt acaactttgt acattattat aaatatttta tattagttgt 420
atattccact gcagatagca accagaaaac taaatacaga aatattacat atagagagaa 480
tataatgtac aaaaaaaatc ttgggagatg agtgctttgg gtttaattct atttttactg 540
aaaccagaga ataataggat tcaaactctac ctaatttttc tattttttctg attttccatt 600
ctgtatgctc ttctttgaat tttttccttg gtca 634

```

```

<210> 97
<211> 397
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (326)
<223> a, c, g or t

```

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<220>
<221> unsure
<222> (331)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (337)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (371)
<223> a, c, g or t

```

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<400> 97
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tccttataca attagaattg catttatatt agggagtttg atattatccc acagatcctg 180
gatgatatat ttcattttct tccttttctt tttcctagtg tttcagtttg gacgagtttt 240
atcgacatat ctttaaggctc actaatgatt ttctcagctg tgtcaagtct cctgataagg 300
ccaataaaga gactatatct attatngtgt ntttaanttc tagcatttcc attttattct 360
tagagtttaa nctctctaag gaaattaccc atcttat 397

```


<210> 98
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 98
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 aagaggagaa tgcggaggag gctgcttgcc tgctgtggga tggatggcag gggcacttcc 120
 ccagactcac ttttctcaga tgtaaaactg accagccttg tgccacagat gtgaagatag 180
 ccccatagaa cttaaagagc agaccataac ttcccatgaa tgagagctac taacatttac 240
 atctgaaaaa caatttggat acttaccaa gtctccaaca aacaaagtca cactgaagct 300
 ggagagcaca ctcataacac ccggaaaaac attttttttt aa 342

<210> 99
 <211> 873
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (338)..(528)
 <223> a, c, g or t

<400> 99
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 ccagactcac ttttctcaga tgtaaaactg accagccttg tgccacagat gtgaagatag 180
 ccccatagaa cttaaagagc agaccataac ttcccatgaa tgagagctac taacatttac 240
 atctgaaaaa caatttggat acttaccaa gtctccaaca aacaaagtca cactgaagct 300
 ggagagcaca ctcataacac ccggaaaaac atttttttnnn nnnnnnnnnnn 360
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 420
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 480
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnntg 540
 aaatcacctg gtgaccattg gacaggcccc agagacaaat cttcttacct gggcaattca 600
 gaaggaggcc aagaccacct ggtgaccatc aaacaggcca tctggaggca aaactcctta 660
 tctggggaat ttagaagtaa tcaaacttcc ctagtatctg aagacggcat ctgatcatga 720
 tacaggaact agaaagaaat catttaggca gttagtgagg gtgaggggaag agagaggccc 780
 tctcatattg tttatttagg ccattagtga gggtgagggga agagagagac cctctcatat 840
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<210> 100
 <211> 297
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (48)
 <223> a, c, g or t

<400> 100
 ggaaaaggcc cccttaacct tcctcctcag gccactcag caaatgtngc cactttgtgg 60
 ccactttgtg taaggcattc cagagatctg gtgaggcacc tatctacaaa tatttatata 120
 cacacattca tatatggttt cagtcacaaa atgggggtcat tctctcccct gacctatcat 180
 ttagggcatt ggaacatggc tgcattgtggc tctgtttgtg aggggtccagg ggatggacag 240
 ggaggctctg cattattttg cttttaccaa cattgcagca tgaacgtttt ttttaact 297

<210> 101
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 101
 aatataaata cgcctttaat agtaacacct aattacctaa caccatcaaa aatgggggtgc 60
 tccatgaaga agcacataat tcaaattatt gaagtttata ccttctaata accacataga 120
 tttctcttgc ccattataaa aattagataa tcagtatttc taggatagtt gttttcttcc 180
 aaccaattaa ggcataatct atgtagcaga acattcagag gatgatgcct ggtcaacatt 240
 tgaataaaca atcactgt 258

<210> 102
 <211> 712
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (603)
 <223> a, c, g or t

<400> 102
 aatataaata cgcctttaat agtaacacct aattacctaa caccatcaaa aatgggggtgc 60
 tccatgaaga agcacataat tcaaattatt gaagtttata ccttctaata accacataga 120
 tttctcttgc ccattataaa aattagataa tcagtatttc taggatagtt gttttcttcc 180
 aaccaattaa ggcataatct atgtagcaga acattcagag gatgatgcct ggtcaacatt 240
 tgaataaaca atcactgtga tgttacctct atttaagatg actccaataa aacttctatg 300
 gtttgcatta ttagttgatc agactttaag cattatcttt tgatagggtc aaggaacctg 360
 tottaactcc ccatctctga ccaaaatata cttgttttct ataagctata aagccagata 420
 gccaatttta tgagaattgt ccctatacta tatccatgtg agcgatgagt gcctggcatg 480
 aagatgcata aaggaggcag taatatacaa caactgaagc ataacctctg gagccagtct 540
 tcttcagaca aatcccaatt ccattactca ctggccacct aaacaagcta cttaattcat 600

ctncctcagt tttcttcaac tgtttaatgg gtatgatcaa caaaccaact tcagtggggt 660
atcataaata ttaataaatg agagaatgca tgtgaaacaa agctataagc aa 712

<210> 103
<211> 173
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (96)
<223> a, c, g or t

<220>
<221> unsure
<222> (140)
<223> a, c, g or t

<400> 103
gaatgtggct ggtgagtagg cacttggtgt ggcagtgtgg ctagtgggta agaacatggc 60
tggtgattag gcatgtgggtg tggcagtgtg gctggngggg acgagcatgg ctgggtgggta 120
agaacgtggc tgggagtagn agcatggccg gtggttggga atgtggctag tga 173

<210> 104
<211> 688
<212> DNA
<213> Homo sapiens

<400> 104
tctgaatggt ttggtgaata aatctgttct tcagcaaccc tacctgcttc tccaaactgc 60
ctaaagagat ccagtactga tgacgtgtgt cttccatctt tactccctgg aaactaacca 120
cggtgtcttc tttccttcac caccaccag gagctcagag atctaagctg ctttccatct 180
tttctcccag cccaggaca ctgactctgt acaggatggg gccgtcctct tgectccttc 240
tcataccta ccccttctc cagctgatca acctggggag tactcagtgt tccttagact 300
ccgttatgga taagaagatc aaggatgttc tcaacagtct agagtacagt ccctctccta 360
taagcaagaa gctctcgtgt gctagtgtca aaagccaagg cagaccgtcc tcctgccctg 420
ctgggatggc tgtcactggc tgtgcttgtg gctatggctg tggttcgtgg gatgttcagc 480
tggaaccac ctgccactgc cagtgcagtg tgggtggactg gaccactgcc cgctgctgcc 540
acctgacctg acagggagga ggctgagaac tcagttttgt gaccatgaca gtaatgaaac 600
caggggtcca accaagaaat ctaactcaa cgtcccactt catttggtcc attcctgatt 660
cttgggtaat aaagacaaac tttgtaaa 688

<210> 105
<211> 977
<212> DNA

<213> Homo sapiens

<400> 105

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ggcttggaga gggtcacaga ggctagtagc tgtgtggact tgcaggcagc cccaaatgct 60
cacctatgtg cagagtcagc atgtcctgcc tcccctggta atgtggtcgc ctgcatctct 120
gtggccagcg ctctcgttca tcattcagtc tgatggcttg agtgcctcta tgtttgctac 180
atgctgagac cgtattctag tgccgtattc tggaggctact ggggtgtacct acagatttaa 240
gaatgcaaat ctggaggtag acccagtgga ttcaaagtag tctcatagaa caaagagact 300
tatatagtga cctttgctgc atccactagt atacaccatc tgaggctctc tgaactgaaa 360
atgaatgtgg aagcaaggga acagtgtgat gtccagctct cagatctcac atggcatctg 420
atttggcttg aggtgcctcc cctcctctct gtcccctggc tgtgggctca tggattggca 480
gagcccagtt atggcttccg ttttacttgc tataatatcc agaggcaatg tactagtcta 540
cctagaaaat tgtgctcacg gcaccccttt gtcacattaa taagcattat ggacactacg 600
acattttatt aagtattttg ttctgggtatc tacttgatta tagtaaatta tcaaaatcct 660
tatttagctc atggactctc attaaagcat gttctggaaa ccttggccat aggttaggag 720
cctgtaaagt ttgattcatt gcaagatata agtgattagc agttggtagt agtgacattg 780
atggggcccca ttaaaaggtc tattggatgt ggtggtggca tagcgatagg ttggagttgg 840
aggtcagcat ggatgtctct gatttagaac caagcttacc tttgcataac ctatagtgac 900
actctcttca tctccccacg ccttagccat gtctccctga ggttcatact gtttgaatt 960
tcacaggctc atttatc                                     977

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<210> 106

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (357)

<223> a, c, g or t

<220>

<221> unsure

<222> (367)

<223> a, c, g or t

<220>

<221> unsure

<222> (391)

<223> a, c, g or t

<220>

<221> unsure

<222> (410)

<223> a, c, g or t

<220>

<221> unsure
 <222> (430)
 <223> a, c, g or t

<400> 106
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 ggttccacct ctgccaaagg cacacctagg agactcctca tgtccagctg agaagagggg 120
 gacacctcct gtctgagact gcagctcaca ctgctgcatg cttcctggac accatctctc 180
 tgaccttggt cgcctctgcc tagcctgcag ctacgttctc tgacctccag ctcttctctc 240
 ttctcccctc ggtaataacca aagtctcaag aacacagccc tcacttctag acagaaaggc 300
 ctcaccagga cccacctgtg tggcccagggt gtgacctcat gtacaaacac atctccnaaa 360
 atcacntct cgctcatcatg gaccctagta ntatccatga gttaacnctn atttctgtgt 420
 taatcggggn tgcagcacat tttgggtgcag attcattgtg gctttgggggt gccatttggg 480
 actctcccc atgcacaatg 500

<210> 107
 <211> 476
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (466)
 <223> a, c, g or t

<400> 107
 gccatctttc cactcattcc ttctcaaaag gaatgtagta ccatatagta gttaagaata 60
 tagacactgg agccgatctt cttgagttcc aatagtgggt cttctacttt ttaaactctca 120
 ttttccttca tctttaaatt gaagatagta acaatctcat ggggttgtga taactaaggg 180
 ggtaatgcat gtaaagtgtc tagaaaatgc ctggacatag gaagctctaa gtttgctgct 240
 actactgtta ttatggttac tattattaat cattgcaagg aaaatgtatc aacagatgaa 300
 tttggttcaa tactgccttc tagttttgtg accttagaat ttataggaac aaaaaagatt 360
 tgaagggagg ttgggctgga tcatagagag ccttgattcc atgttttagg atgtatacac 420
 agtgagaagt ccttcagggt ttgggtcctgg gaagagttgt gaatcngaaa gttaac 476

<210> 108
 <211> 834
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (824)
 <223> a, c, g or t

<400> 108

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ataagtatgc atgcttcata tacttcattt attctttctt ccttgaagcc tctcctcttt 60
attagggcact attcatttgt ctacttggta cctgtatttt tttaatgtca ctattttgac 120
agtaccaata aaggtaaagc cactcaatta cgcagggctc tctctttatg ctttgggtag 180
gtgcacctgt gcaactgagg ggacggtcag tggtatcaag gttacctgtt attacaagta 240
gaagaaccca caaagatcag gagagagctc attttctctc attagtagga ggtaggacta 300
tacattcaca aacacgaacc ttaaaatagc tcacaaaata gtgtcataca tgtaccagc 360
catctttcca ctcatctcct ctcaaaagga atgtagtacc atatagtagt taagaatata 420
gacactggag ccgatcttct tgagttccaa tagtggtctt tctacttttt aaatctcatt 480
ttccttcata tttaaattga agatagtaac aatctcatgg ggttgtgata actaaggggg 540
taatgcatgt aaagtgccta gaaaatgcct ggacatagga agctctaagt ttgctgctac 600
tactgttatt atgggtacta ttattaatca ttgcaaggaa aatgtatcaa cagatgaatt 660
tggttcaata ctgccttcta gttttgtgac cttagaattt ataggaacaa aaaagatttg 720
aagggagggt gggctggatc atagagagcc ttgattccat gttttaggat gtatacacag 780
tgagaagtcc ttcagggtttt ggtcctggga agagttgtga atcngaaagt taac 834

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<210> 109
<211> 498
<212> DNA
<213> Homo sapiens

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```

<400> 109
tttaaattgg gagttaagga tgagcacttt tactgtatta aaaaatactc accagttaaa 60
aaaaaatact cttttccctt tcctcggaca cctaaatcta agagaacaac tcctatataa 120
aaatgatata aaaatcatat attttggag tatgtttcta actgttctga gaggctgcat 180
ggtaaagctg aagtgaaga tgtattttta atctgtatat atgagcaagt atatattgat 240
gattgaagct aggtgctgcc taaatacatg gccagactt tgaggaatta tagtgtaatg 300
gctgggaata caggtttggg gtcacaccgt agagctgaaa gcttggcttt tatttagctg 360
tggttccttg ggcaggatac gtaatctgtc tgtgcctgaa ataccaccca caccatcct 420
gtaatggggg gataataagc ctgcctatct catggggcta ttaagaattt tcagttaact 480
tttacttatg aagtgcta 498

```

```

<210> 110
<211> 259
<212> DNA
<213> Homo sapiens

```

```

<400> 110
tttaatgtgg tttagtttta gtcacttaga tttgcttttt atggagtgac tggagtttgg 60
ggagggggagc agggagggtt ttcttttttt ctttataaca ctggctaaat attttaatta 120
ctgctataga aggaagaagc taaaagtatt gcattcacia atattgcata gattatacaa 180
acacagaaat atatgcatat gcatgtttta aatatatgcc acatatcaac accatgtatc 240
caacttgaat aaggtcatt 259

```

```

<210> 111
<211> 414

```

<212> DNA
 <213> Homo sapiens

<400> 111
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 gacatatcac ttgcctcatt aacatcaagc atcccaaac ccagtctggg tcagttttgc 120
 ccagagtggg gttttagtaa cacgggttct cctgggatcc tatacctagc ccagaatcag 180
 ttgcaaaagc caggccatag caaattgtcc tgccagccag atagcagaga atctgacggc 240
 agcaggcaga aggagccgct ccattgcagt aagccaagat cgcgccactt gcctcattac 300
 atcaagcatc ccaaaaccca gtctgggtca gttttgcca gagtgagggt tgtagaacac 360
 gggttctcct gggatctata cctagcccag aatcagttcc aaaagtccaa aaga 414

<210> 112
 <211> 589
 <212> DNA
 <213> Homo sapiens

<400> 112
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 gtgaaggacc caggaagtac agacactggg ggtcaaagaa caagggtagg agtgtcatca 120
 aatgatagtg ttggcagcat gggagctgtg ggtagagagt gagataccta aatttatgat 180
 ttctgggtgg cagtaacttc taggggtgtg ctgtgggagt gggcctctga atgggggtgga 240
 ggagaaaatc attaaagatt agaaaatctt gggatttaga ggatagggtg tgggatgggt 300
 gatacacgtt agtgttgcat ttgccaggg taacgccaa agttggcaga gaaaataata 360
 ctgacctaga ctttaataaa ggatttgga atgacagaga agcaacagta aaaataaggg 420
 ataattagat gtttggtgtg ttgcctggc tgtgtctgtc ctgtgtctgg ccaattatta 480
 caatgtatctt acactgtaaa tacatgtaat tcatataata gttttataag tagcaaaatg 540
 tagtttaata aaaaaccatc ttagtcttct tacagaatat ttagttacc 589

<210> 113
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 113
 cccaggctgg gggtcagggtg aggagggagc tgggatccag caagcctagt gaaacccagg 60
 ggacagtggg ctcggtcaca tccaggatgg tgatcaacag ctgcatcatc ccgcttcctt 120
 ctcaagcgac aattccagag ccttgggcac acgggtgcttg tatctttcgt attcagaccc 180
 cctgggggtt cagcccctta ctgccttcac tttcctctca ccccttgact catctttcct 240
 gctacttgct acttgagata cctaagatga tgtgtgttat ggagagggtta gagcaccagc 300
 ttcagaacca ccctgtgact ttggcctagt cacctgacat ttctagactt tgggtgtcttc 360
 attcataaag gcagtgtgga ctgcttgctg atgttatcgt gaacctgaat tccttcttag 420
 agtttctaag tgctttctgg ggattaacct tttaaatcct tgcagtagcc c 471

<210> 114

<211> 1032
 <212> DNA
 <213> Homo sapiens

<400> 114
 aatgagggag ctcttgagct cccttgatga gcaccacaca gggccctctg ggaagcagta 60
 agaacccatc ccaggggtca ataagaacct aaccagcct gggatggccc ttccctttct 120
 gccaaaggcc ttcccatgcc aaacctcagg cccttatctt ggtatctgtc accaccacc 180
 accccccga cacacacaca gtcatgcaag ttgtaagaca gtgacagaag atttgaagaa 240
 gaccaccaga gcaggggata gcagaacatg cagacttagg gggaaagccag gcgttcatac 300
 caaagaatta gacctgttg gtaccaggc tgggggtcag gtgaggagg agctgggagc 360
 cagcaagcct agtgaaacct aggggacagt ggactcggc acatccagga tggatgatcaa 420
 cagctgcac atcccgttc cttctcaagc gacaattcca gagccttggc cacacgggtgc 480
 ttgtatcttt cgtattcaga cccctgggg ttccagcccc ttactgcctt cactttcttc 540
 tcccccttg actcatcttt cctgctactt gtcaacttgag atacctaaaga tgatgtgtgt 600
 tatggagagg ttagagcacc agcttcagaa ccacctgtg actttggcct agtcacctga 660
 cattttctaga ctttgggtgc ttcattcata aaggcagtgt ggactgcttg ctgatgttat 720
 cgtgaacctg aattccttct tagagtttct aagtgccttc tggggattaa ctttttaa 780
 ccttgcagta gcccaataag gtaggtattg ttgttatccc cattttacag gtaaggaaac 840
 tgaggcacag agagtaattt gcacaaggct tatggctttt tagtggagga gccaagagtc 900
 aaattaagag tggttgagtc aggcattggtg gccctgcct atagtcccag ctacttgaaa 960
 gagtgagggtg ggaggatcgc ttgagcccag gagttcaatg ctacagagca agacctcaac 1020
 tctttaaaaa aa 1032

<210> 115
 <211> 440
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (428)
 <223> a, c, g or t

<400> 115
 ggactacatc catgttccac cacaccaggc tccaattaca ttttgacttc tccacttgga 60
 tgtttaaaat gcttctcaaa tttaacatat cctaaagata attttgtgtc tccccacaaa 120
 acttgctctt tttgcattca ttgctgtctt agttaatggc accaccatcc atactgttac 180
 tttagccaga aacctttgaa acatcccaat tggctcttct gattttctct gtttcacaac 240
 ttattctcca cagacaggat actccaaaca gtacccaaag ccattgtctc ttatactttt 300
 caatctataa aatatacata cataagagta tataaaatat attataaagt aaatatccat 360
 gtatccaaac acacaggttt agaactggga acacaatatg caaaagaata atattgggac 420
 cccctancc tcatgtcata 440

<210> 116
 <211> 249

<212> DNA
<213> Homo sapiens

<400> 116
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 attttgtttt caaatctttg taattccctg aagcaaatac tttcaagcca gttgcaaaat 120
 gctgcttttag aaataattca tataaacatg cttctctatt taatcacaag gggagatgtg 180
 gagaatggat gttttatttt ttcagtagtt tttgctctat aaaaatatta aattgctatt 240
 atgattact 249

<210> 117
 <211> 1017
 <212> DNA
 <213> Homo sapiens

<400> 117
 gccctttttt ggtgtgcccg ctgaatgagc actccaggct gtggagtctg ggacatgcct 60
 tggtttggtg ggaccatgct gcctgcctgt cgagaccaag catcgatact gtgtgtctac 120
 ctgatgaaaag tgtccagtat gtgtctgcat gacttgggga cactaagaaa accaaaggga 180
 ttagcaacaa agagagcttg tcacctttgt gcggaaccag ctggcatctc acagggacaa 240
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 caggagcctt atgctagaac cttttatttt gtttcacgtg atgcagacag agataaaact 420
 gcaaatttta tgaaacttta acaatcagta caatgtttct ccttaagaac tttgtaaata 480
 gcatttatct ttcaagagtt ctttctctct ttttgatgatt attttataaa cttaaaggaa 540
 aaagagaaaa agtcagtggg tccagcattt gcttttagtct gtgacttaaa tggattataa 600
 ctcttgaccg ctgacattta ccaagataaa tcagtgggtca tagatgtgga gcttgatgtc 660
 tcttcggctc tgggaccaat ccccttgagc aaaagttttc ctgtgttctt agtattctga 720
 actggctaca gcaactttta ggaaaataaa gggtacaaaa aaagtctctga caatttggtt 780
 gcttttacat tttcaaatgt gtgaaatgta gagataattt tgttttcaaa tctttgtaat 840
 tccctgaagc aaatactttc aagccagttg caaatgctg ctttagaaat aattcatata 900
 aacatgcttc tctatttaac cacaagggga gatgtggaga atggatgttt ttttttttca 960
 gtagtttttg ctctataaaa atattaaatt gctattatga ttactaaaga taaaaaa 1017

<210> 118
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 118
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 actcaggact gtttaaagac caaggctcctg gccactgaaa taaaacatct gcaactggca 180
 gattaatgaa aggctctaga aggaaacaaa aaaccaaga gactgctggc agtgatagct 240
 gagtttttag gggaaaagtt gtttttagttt tccctgtata ctttcttggt tagtttttaa 300
 aatctacagt atttacactt tcaaaacaaa at 332

<210> 119
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 119
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 aattctgggtg aacactgatt ttatgtctcc attcttgagg aactgttagg tttgttttca 180
 tctgtatgcc ttgattagag caaataacct taaatatcct taaggaaact tagatatata 240
 tcatttccag tttttatcaa atgtgaattt tttttgtcat actgcccacc taacatggga 300
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<210> 120
 <211> 718
 <212> DNA
 <213> Homo sapiens

<400> 120
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 tgaatttatt tgtaggtctt cttgtgtatt taaaagctaa gttatcttgt aatcattttt 120
 ttctatacct ttgtcagtaa cctcttagtg atgaaataaa aaagattagg taatcatcca 180
 gcaatgggga agaagttaag gaacaaagag ctacagattaa actagttttt agaatacct 240
 catttctgca tgaatttgaa tcatggaaaa caaatgtag cactccaaca tttgatgcaa 300
 aactaaaagt ggaatactgc tttgatattt gaatgaattg aaaaataatt aacatccttg 360
 gaactgtatg taaagaagga cttcacaagt attatagata cccccaacct cagccctttt 420
 cccatgtatc tctttgatca catccctacc tcatagatca cccatgtgct gaagactttc 480
 agttctgtat cttcattcta gatctcctga actcaagatc agaatatctt tctgacttct 540
 gactgtgtat ttctggatgt tatacaagaa cctcagctca aactcagtat tccctaaacc 600
 attgtttttg aaactttatg ttggatgtga aatctgtatt gtagaataac attaaaaaaa 660
 gaaagaatag tatgcaaaat atcagagtgc attgtatgta gcaagagtag gtatttttc 718

<210> 121
 <211> 2617
 <212> DNA
 <213> Homo sapiens

<400> 121
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 acacagtgga atgctcttca ccataaaaaa ttcacggaat catgtcattg cagcaacatg 120
 gtggacaatg taagaaaagc tccccggaga agctgtacag aagctgcctc ctacagcagtc 180
 agggccaggt accggagctg tttttaccca aggacagggc cggcccccaag tcatcccaga 240
 gctgccatgg caccacctca gtcgggtcct gaggaatcct acacaagcta cttatatcag 300
 tgatcactag gataatccat agaacttttg ggaaagaagt ttaagacctt tctcccacca 360

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tttcagcagg ataaattcca actggattag aaaatgaaat gttaataatg caaataagta 420
catattttata tctgtatata aaatacagtt gatattttgcc tgggtgttttag gtgtctaaag 480
gacttttctaa gcataaaggc aaaaaaaagt cataaaaaatg ctatagcagt ttgagactct 540
atgcaggaaa gggcatcatc acgtgcatgg atgaatctgt atctaatttt aaacaatttc 600
caatgggtgcc tgtttccttt tctttgaaaa tctctggaga aatagttcct cttgctgtgt 660
ctttcttttag gcaagaattt ttactaattg atgtgtagtc tgaatcctgg ctaagtataa 720
acctttttatt ttttatacct gttcttagtg aaaatgaaac tgtgactttt tttttaattc 780
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cttttcagag ctcccaaaaa gaatagcttg ctcttgacgt tgtacatggt agtggaatga 960
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gatgtaacta ttagatattg ggaaagaagg tgacgaagggt aggtatcacc gaaagcactt 1080
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tcagagtgca ttgtatgtag caagagtagg tatttttc 2617

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<210> 122
 <211> 373
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (74) .. (294)

<223> a, c, g or t

<400> 122

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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
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tctcaaagag ggcgatgatct tcaagaatta ataaccctct caagtctcta caatctaata 360
caattacctt ggg                                     373
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<210> 123

<211> 308

<212> DNA

<213> Homo sapiens

<400> 123

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gggctgtctc tccctgggtca gacagggagc tccccgaggg cagaggtcct gtctcctcca 180
tcagactggg agccccaca accacaaagc tatgtctact ttcacagaa ggagctccct 240
aagtggggaa gggttctccc tattttcccc ttccaggtgg gaaattcctg gccaggggtcc 300
cctgtctc                                     308
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<210> 124

<211> 774

<212> DNA

<213> Homo sapiens

<400> 124

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gttcccgaag gccctcggga aagttggtga atgcaaacag caggcagcca gagagcctgc 180
tgcagaggag accagagacg atgccccagg agggcacaga agtgtgcaa agactcagca 240
gtgggaagga gcctgggtccg tgagtgtgag gagataacct gggccctagg cccttctctgc 300
cccaactttc caccacctgg ccagccccct tgcagcgggtg aggccttagca tctctctgct 360
gggtttgtga gagcccagac tgccccagtg aggggtacagg agtactctcc ccaggcagga 420
aggggtgggcg gcctccctcc aggtacccaa gaggaaatgt tagcagctga aagccccaga 480
gcagagctgt tctcatgggg aaggacctcg tcttccccat catcctaggc gttcattgag 540
gatgaggact gtcttctctc atcagaccga gaggttccaa gggcaagggc tgtctctccc 600
tggtcagaca gggagctccc cgagggcaga ggtcctgtct cctccatcag actggtagcc 660
cccacaacca caaagctatg tctactttca tcagaaggag ctccctaagt ggggaaggggt 720
tctccctatt ttccctctcc aggtgggaaa ttcttgccca ggggtccctg tctc 774
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<210> 125

<211> 271
 <212> DNA
 <213> Homo sapiens

<400> 125
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 cagtacacag gaagcctccg cccacctcca cctcccagct tccccctttg gaggtatctg 120
 ctgtagtggg ctcctcaaga tacttctagc catgctctgt ttgtgcatgc ttatccctgc 180
 acagacagca gaagctgtct tggccaacaa gaccaggaag cattggtatt tgcagggttaa 240
 ttgaaaaatt catttaaggt ggagaaccat a 271

<210> 126
 <211> 1950
 <212> DNA
 <213> Homo sapiens

<400> 126
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 agaatcttct cctggactgt gagggtagat acgggtggat tgtatggctt cattgaagat 120
 gccagtcctt gcattggcat ctgcagattt gaagaagtag gcccctcttc tagtcttcat 180
 ggactggatt tggcaagaaa agtccttcat cagtcagcca ttcagaaact ctgggaagcc 240
 tatctggtaa cgtccatggg caggcaaaat ttgccattca gctacaagaa gtgcagttgg 300
 cagacagcct tcaacttcag catcttcaga gtctgccttg actttcaagc tgaggccatg 360
 gacttctcag gagctcctag ccaatggctg agaacaacgt gtctaacaca tgttctcttt 420
 ctctttgatg gccaaggcat ggctggccaa tgggatgctt ctctctccaa aggagcaggg 480
 agagctggag ataccctcct tgcaaacagc agcttgagga tccagcgcct ggtgcacagc 540
 ccacagcgac cccaagaagc tgctccaacc cctgggacta tggagctcta cagctgtaga 600
 gaccaccagg aagtggactg caggcccctg gcctctccat tcagattctg caaagagatc 660
 ctgatgggtt gggccaatgg gtcaggcatc cagtcagctc tggctaaggg agctgcctgg 720
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 gccacaaagt cctggctgcc agtgctccct ggtctgatcc taaacccgtc ctctctgggt 840
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 cagcgtgcc cgggcgtgt ctcgggaccc cgacagctgc gggtggcggg caccataggc 960
 cgaagcacc gggaaagaga ccctgagacg ctgctgaatg agcaaagcaa ctgcaaaaca 1020
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 gtggatgagg ttcagagggg ccatgcagct tggccagagg gcacacagcc agagaggcag 1560
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 agtcgtacgc atggttaaaa aaaaaagaaa agaaaatcca aaatagtact gaaggtagtgc 1740
 agtacacagg aagcctccgc ccacctccac ctcccagctt ccccctttgg aggtatctgc 1800

tgtagtgggc tcctcaagat acttctagcc atgctctggt tgtgcatgct tatccctgca 1860
 cagacagcag aagctgtctt ggccaacaag accaggaagc attggtattt gcagggttaat 1920
 tgaaaaattc atttaagggtg gagaaccata 1950

<210> 127
 <211> 209
 <212> DNA
 <213> Homo sapiens

<400> 127
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 tttattattg agaatagtgc ttgttctctg agtactcctg acttagaaaa ggagcatagc 120
 cctactaaag gggacttcaa agtagaaatc gtcaataacc ttttacttgc tacagttagt 180
 ggcctcaaca tgatgttttt aaagatcctt 209

<210> 128
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 128
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 tgtattcagc tttcctgcct ctggctctct gtcttttacc nnnnnnnnnn nnnnnnnnnn 120
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
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 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
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 taaccccaga ttcata 496

<210> 129
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 129
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 aaaaaaatcc tatccagaca aaataaatca gtgttttata tttttggagc atcagaactt 180
 actttaagac ctactggta attcttttagc ctctcacatg tgataaagac attgtgctta 240
 cattttttta aa 252

<210> 130

<211> 149
<212> DNA
<213> Homo sapiens

<400> 130
atcagaatcc tgggaagggt ttgttaaaac actactaggc aggggtgaggt aacctaagag 60
cttttgaggg cccagggtgag agggatcact tgcggccagc agagttcaag agcagcccag 120
gcaacacagg gagacctctt ctctacaaa 149

<210> 131
<211> 390
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (217) .. (273)
<223> a, c, g or t

<400> 131
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cgggcccggg cgagctgcag gcctgaaacc caccaccct cttagatgtg tctgtggggc 120
atagaaatta ctagggttgt cttgggtgtg gcctcaacct gttcaacaac aggtgtgctg 180
tttcattctt ggaaaccagt cctctgtctt ccagaannnn nnnnnnnnnn nnnnnnnnnn 240
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gcttttgagg gccaggtga gagggatcac ttgaggccag cagagttcaa gagcagccca 360
ggcaacacag ggagacctct tctctacaaa 390

<210> 132
<211> 1079
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (874)
<223> a, c, g or t

<220>
<221> unsure
<222> (879)
<223> a, c, g or t

<220>
<221> unsure
<222> (885)

<223> a, c, g or t

<220>
 <221> unsure
 <222> (887)
 <223> a, c, g or t

<220>
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 <222> (890)
 <223> a, c, g or t

<220>
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 <222> (894)
 <223> a, c, g or t

<220>
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 <223> a, c, g or t

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 <222> (924)
 <223> a, c, g or t

<220>
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 <222> (926)
 <223> a, c, g or t

<220>
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 <222> (931)
 <223> a, c, g or t

<220>

<221> unsure
<222> (933)
<223> a, c, g or t

<220>
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<222> (944)
<223> a, c, g or t

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<222> (950)
<223> a, c, g or t

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<222> (975)
<223> a, c, g or t

<220>
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<222> (977)
<223> a, c, g or t

<220>
<221> unsure
<222> (988)
<223> a, c, g or t

<220>
<221> unsure
<222> (993)
<223> a, c, g or t

<220>
<221> unsure
<222> (995)
<223> a, c, g or t

<220>
<221> unsure
<222> (1007)
<223> a, c, g or t

<220>
<221> unsure
<222> (1013)
<223> a, c, g or t

<220>
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 <222> (1030)
 <223> a, c, g or t

<220>
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 <222> (1037)
 <223> a, c, g or t

<220>
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 <222> (1050)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (1061)
 <223> a, c, g or t

<400> 132
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 tctgcactcc aggetcagat atgcaactcc ctatttgaca ggtctgcttg aaaacttgct 180
 gggcatccca gaggtaacat ggatctaag gaaggtttga ttttgtcctc caagccagtt 240
 cttcccttga ctttctacat ttcaccaa atgaccccaa ccactcactt attctagccc 300
 aagatctagg agttattctt aggttttctt ttacccctc cactatggatc catcagcagg 360
 tcttgttctt ttttcttccc aaatatatct caagtccatg ctcttctgtc tgtccctact 420
 gccactatcc aagctctgag gccatccatt acatggacaa ctataaacta catgtcctaa 480
 tgacatatta gcagtagagt tgctagggtc aaagatttgt gtgttttatt ttgatagact 540
 ttgtacatt attctcaaag aggccttctc agtggtatct gcttattata tgagaatttc 600
 tgtttctgta ctctgtcacc accactgaat atcaggggtc ctcttagccc atagcctcgt 660
 gagaattaga agtcacttcc tctgggtgag gcagctagct ccacagcaca gacttaacaa 720
 gtggaacttt agcatgtatt taattcccac tcattctctt acctatgtgt ccttctgcag 780
 tcaacactct acacaactgt acatgaccac aatgctgtgc ataaataatt ttttagactc 840
 tttgtaaatc tatatgtaaa aaatggcatc ttantttgna taagnanggn ggangncant 900
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 acaaattgga aaatncnggg gttaaccnaa ggncnatcat atatttnacc atnaaaaatt 1020
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<210> 133
 <211> 303
 <212> DNA
 <213> Homo sapiens

<220>

<221> unsure
 <222> (295)
 <223> a, c, g or t

<400> 133
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 caaccaggga tttaaaaaat ggtttctggt gtccaggtaa gtttgcataa aaccaaata 180
 aaactgttta atactgggcc cactacatta atctatgggtg ctaacacgtg ctgtgaaccg 240
 tggggtcagg ggctggggga taaagttgca accattttttt ggggggttgg gggangagga 300
 ggg 303

<210> 134
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 134
 ccggcgaatt taaccaaaaa aaaaaagtaa tatgaccata attaatatca gtcaaaatat 60
 tctttaaagg aaaaaaatac taataagaga actctataaa aataaagaat ataataaaaa 120
 gagatcacat ttgcaaattt acattgttta atatcatagc ctcaaaataa attgcatata 180
 aattttaaaa cctatggaga aattgacaaa tccaccaaca ctgtgggaaa tttttaatac 240
 atatctctta gctattaatg cataaagtag gtaaggaaaa ccaataggat gcaaataatt 300
 tgaacaataa aatcaacaac tttgatttag ttgatataca tatacagaca cttgcattta 360
 gtaattggaa aatatacatt attttccaac acacacaaaa aaacacttgc aaaaatgggc 420
 tgtgtcttaa atttttcaaa gaactgatat catacagaac acatgttatg accataatgt 480
 agttacatta gaaaatgtgg cagggattct gattctcctt tctgtgctag ggcatacagt 540
 taaatc 546

<210> 135
 <211> 590
 <212> DNA
 <213> Homo sapiens

<400> 135
 aaaaaagtaa tatgaccata attaatatca gtcaaaatat tctttaaagg aaaaaaatac 60
 taataagaga actctataaa aataaagaat ataataaaaa gagatcacat ttgcaaattt 120
 acattgttta atatcatagc ctcaaaataa attgcatata aattttaaaa cctatggaga 180
 aattgacaaa tccaccaaca ctgtgggaaa tttttaatac atatctctta gctattaatg 240
 cataaagtag gtaaggaaaa ccaataggat gcaaataatt tgaacaataa aatcaacaac 300
 tttgatttag ttgatataca tatacagaca cttgcattta gtaattggaa aatatacatt 360
 attttccaac acacacaaaa aaacacttgc aaaaatgggc tgtgtcttaa atttttcaaa 420
 gaactgatat catacagaac acatgttatg accataatgt agttacatta gaaaatgtgg 480
 cagggattct gattctcctt tctgtgctag ggcatacagt taaatcacat tttcaccttc 540
 cttgtattta tgagacttag ctctgtcctt atgaatgtgg gcagaagtga 590

<210> 136
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 136
 gctcgaggcc tggcatctga gttcttctgt tcaggagaaa cactttcagc aggccattga 60
 gagggtcacg ggaggtgagc ctgggagccc ttaggaggagg aggggtgttt gcagctctgg 120
 gcctggcagg ctcacccctt ggccccagtt tcaattctgc atgca 165

<210> 137
 <211> 172
 <212> DNA
 <213> Homo sapiens

<400> 137
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 ttaacttatt ttaaataaaa taaacttaat ttaaaataaaa attttggtat ctaaagccaa 120
 atagaaaaaa ttccacattt tttcttacag tgctcattca tcagaacctt tt 172

<210> 138
 <211> 809
 <212> DNA
 <213> Homo sapiens

<400> 138
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 tatatgtcct ggggtgccctg tggctgtgat tttttaaggg aaattaactt attttaata 180
 aaataaactt aattttaaact aaaattttgt tatctaaagc caaatagaaa aaattccaca 240
 ttttttctta cagtgtcat tcatcagaac cttttttttt tcttcttatt ttttcttttt 300
 ttggggagaa tgggtcctcc ctttgggtgcg catcaggggg aataagaggt acaaacaggc 360
 ggtgattata cgctcacttg ggagtttggg aactccgggg gcatcattgg gattcccat 420
 ttgtcctcaa gcctccggag tagctaggac atacgggttt tgcaccacaa ggccgggata 480
 aatttcacaaa tttttctcac gagacaaagt ttgggattct tggccccagg attgggacgg 540
 ggtatatcac aaaagaaact atttcagggg cgcttagaga ggctcaagt acacctactt 600
 atcaggggtt tccagtggag agaactgtac cctaccctta ctacctttta agtgggtgcct 660
 ctccctccac ctttaacctt tacacattac ggaactggcg ctatcatttt aaagtcaact 720
 aacctggact ttggacttct ttaacacttc agctccggga tccaaactaa aatcttaggc 780
 aaggcctaag ggacggtaga agtctacgc 809

<210> 139
 <211> 294
 <212> DNA

<213> Homo sapiens

<400> 139

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gtcttttttca ttcataagtaa ccctgcaaaa caaacatata gaacagagac attatggaga 60
cttgaggatt gattttatgt attgattatg tatgtaagtc ccgataacat ctctgggttca 120
ggaaattgca agaaaaagat tgggaatcag aacagcagaa aggtatTTTT ggaagggtaa 180
tttactgatt tttcgTTTT aattgttgac attgccttcg ccggtggaaa tgaattactt 240
atgtgaatct ggcaggaaca caatttttaa aattagaaaa ttagtcctcc ttat 294
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<210> 140

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 140

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acctaaacac attttaatta tattttgctc atttttggag aaccattcc ctttgacatc 60
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ttttattcca tgaggaaggt gttaaaccag ctttgagtt tgaattttat tcttaaaggc 180
tctgcagttc ttacctggat gtcgaaatga tttttaattt caactgctgt agacctcatc 240
ctgtgggaac tagaaataat gtccaactgc cgtccagtct ggcgacattc cagccgttcc 300
cccacccac gataacggcc tgactcttcc tcaattcatg acagcccatt ctacacataa 360
cctttctcct ctggcaccgg tctctccagc agagagggat cctgcccttc ccttcccact 420
ctccagcata cagaccagca ggaagccaca agagggaaaa acaaaagcct tctgtataag 480
gcctatgaaa ggaccatggg ccagcctcag aatctgctgc ccctacaaac cagtattcct 540
caaatgatag ttccacattt acttaataag gaggactaat tttctaattt taaaaattgt 600
gttcttgcca gattcacata agtaattcat ttccaccggc gaaggcaatg tcaacaattt 660
aaaacgaaaa atcagtaaat tacccttcca aaaatacctt tctgctgttc tgattcccaa 720
tctttttctt gcaatttctt gaaccagaga tggtatcggg acttacatac ataatacaata 780
cataaaatca atcctcaagt ctccataatg tctctgttct atatgtttgt tttgcagggg 840
tactatgaat gaaaaagaca atttcatgaa tgcagaaaat ctggggatcg tgtttggggc 900
cactctgatg agggccccctg aggacagcac cctgaccacc ctgcatgata tgcggtacca 960
aaagctgatt gtgcagattt taatagaaaa cgaagacgtt ttatttcta ccatcaggga 1020
aatgagctga atggccccag caccatccaa gttgac 1056
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<210> 141

<211> 968

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (319)

<223> a, c, g or t

<220>

<221> unsure

<222> (497)
 <223> a, c, g or t

<400> 141
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 aataaggctt agaaagaggg attgccagaa actttggcag ctggattgcc tgtgcttggt 120
 cctctaagcc atacctaaat tctgcagtaa atacttaact ttttaatagg gaaattgctt 180
 caagataact tgaccagtga tacggtaaaa taattagact attggactaa tggtttaaca 240
 caagtggctt taaaaagtct gcttaaaaaa caatttttat ttagaaaaaa tagaaaaata 300
 aaaacatctt caaaatttng gagcctgaag gggctgtttg tttcatatat ggataatctt 360
 tgaaaaggca agtcctgtat gtatttttca tttgttgaaa gaagattggg tatcagtagg 420
 cttgcaaaca taatttgctt ttaagttctt tcaaggtttt atgcaataaa acctattgat 480
 ttggaacttt aaaaaanaaa acaacaaaaa aatactttca gggttttgta atttcaagtg 540
 gttttttaag gggagcaata gtttgccatt taccaaaggc ttctccagat aatttcttaa 600
 atgtttctac ttaaaaaataa aagctattaa taataagctg tcatgggatc catttgaaga 660
 cagggaaaat agaaaatttt tattgtaaag ggaagaactt atccttttaa ttttatggac 720
 taacagagtc tgcaggctct aactcatttc agcctgtcaa atgtgcaatt aaaaatgaat 780
 tttctaattg tattcaaagtg aggcctctata gtgaatacag aatcactctt ctaagttttt 840
 tcccagttaa tttgttttaa agtggtgtac tctcttgcaa gaacgtttaa aagttaagtc 900
 ttgtaactgt taacatctaa tgtattaata taagccattt gttttttacc atttttttaa 960
 ggccgtat 968

<210> 142
 <211> 1466
 <212> DNA
 <213> Homo sapiens

<400> 142
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 gaatctgggc agtttgcaat ggcctatttg taagaaatat caagacttct tgagaaaaat 180
 gaaaagtga tacataaatg cttaaaatct ggtacttctg agttaagggt ttgctctttg 240
 agcttaatcc aatttgggat gatttttcat cctagggtt tttgttttcc ttttttat 300
 ttattttttc tttttttagg ggaaggggac ttgctttctt ttccaaaaag gtgaatcctt 360
 cttgtaggac ataggtaaaa aaaacaaagc tgaaatatat gttttgaata tagatagcta 420
 attccctggg atataatatc ctttcaattt tttttttttt ttgggcccag tctgcctttg 480
 gatgtttcaa aagtctgaac gagatgtccc agtaacctaa aattatccag tcggtcttct 540
 tactttacaa ctaagaaaaa taaggcttag aaagagggat tgccagaaac tttggcagct 600
 ggattgcctg tgcttggttcc tctaagccat acctaaatc tgcagtaaat acttaacttt 660
 ttaataggga aattgcttca agataacttg accagtgata cggtaaaaata attagactat 720
 tggactaatg gtttaacaca agtggcttta aaaagtctgc ttaaaaaaca atttttat 780
 agaaaaata gaaaaataaa aacatcttca aaatttagga gctgaagggt gctgtttgtt 840
 tcatatatgg ataatctttg aaaaggcaag tctgtatgt atttttcatt tgttgaaaga 900
 agattgggta tcagtaggct tgcaaacata atttgctttt aagttctttc aagggtttat 960
 gcaataaaac ctattgattt ggaactttta aaaaaaaaac aacaaaaaaa tactttcagg 1020
 gttttgtaat ttcaagtggg tttttaaggg gagcaatagt ttgccattta ccaaaggctt 1080
 ctccagataa tttcttaaat gtttctactt aaaaataaaa gctattaata ataagctgtc 1140

atgggatcca tttgaagaca gggaaaatag aaaattttta ttgtaaaggg aagaacttat 1200
 ccttttaatt ttatggacta acagagtctg caggtcttaa ctcatctcag cctgtcaaatt 1260
 gtgcaattaa aaatgaattt tctaattgta ttcaaagtga gctctatagt gaatacagaa 1320
 tcaactcttct aagttttttc ccagtttaatt tgttttaaaag tgttgactc tcttgcaaga 1380
 acgttttaaaa gttaagtctt gtaactgtta acatctaattg tattaatata agccatttgt 1440
 tttttaccat ttttttaagg ccgat 1466

<210> 143
 <211> 306
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (289)
 <223> a, c, g or t

<400> 143
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 gtcctgtgat gtgaacctgg ctatcttcaa ttcacaggat agggagtaag acatttcatt 180
 ttggccttag gtccaagcca tcttcttcaa ttagtagtact actagagagc ccacaatgaa 240
 gccataaatt ggctcccat ttggcaattt gtgtcccttt cagaaagang aagggttagt 300
 aatcac 306

<210> 144
 <211> 494
 <212> DNA
 <213> Homo sapiens

<400> 144
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 gtcctgtgat gtgaacctgg ctatcttcaa ttcacaggat agggagtaag acatttcatt 180
 ttggccttag gtccaagcca tcttcttcaa ttagtagtact actagagagc ccacaatgaa 240
 gccataaatt ggctcccat ttggcaattt gtgtcccttt tcagaaagag gaagggttag 300
 taatcagcac ttttaagtac cagcatgcag cattaacaag ttctcaaggc ctgcaagcca 360
 tagggtttct gtcttccctg tattggcctt gtaatctctg accatgatta gggtaagagt 420
 taagagactc ccaggacagg aaacggaaaa catcagattg tgtatggaat gaaccctctt 480
 ggctggatgt ggtg 494

<210> 145
 <211> 174
 <212> DNA
 <213> Homo sapiens

<400> 145
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 atgtcacttt ctttttagctt gcatttcctt tataggaagg ccatttttagg agtcctgggg 120
 cattttgact caacttctta aatcatttat tctattcaca aaaggtttat tgaa 174

<210> 146
 <211> 445
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (371)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (391)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (406)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (427)
 <223> a, c, g or t

<400> 146
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 tggccatagg aaccgcgtga tccatcttct atcacttttag attgaatttg tctttcctac 180
 tgttttatat aaagaaatta cctcctttaa gtcctatcaa attcctgatc acccttaaaa 240
 aacaattttt aggtattacc ataaaacctt ccatgacatt ctctgcttta tcttctctgt 300
 gctactttgt ccattcattg ttgcattgta atgtatttct gtacatgtta tatcactaaa 360
 ctgtctcctc nttgaaggga gggacatgtg ntcacatct atttcnaagg cttatacaga 420
 aactganaca tagtagatgc ttact 445

<210> 147
 <211> 734
 <212> DNA
 <213> Homo sapiens

<400> 147

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tgatttttaa caattgtgtg tgtgcaccca gctaaccatc tctacaatcg atctagaaca 60
ttttcatcac ttcagtgtt ctcgtatatt ccttcccagc taacccatga tccccaaccc 120
tgcccatagg aaccgctga tccatcttct atcacttttag attgaatttg tctttcctac 180
tgttttatat aaagaaatta cctcctttaa gtcctatcaa attcctgatc acccttaaaa 240
aacaattttt aggtattacc ataaaacctt ccatgacatt ctctgcttta tcttctctgt 300
gctactttgt ccattcattg ttgcattgta atgtatttct gtacatgtta tatcactaaa 360
ctgtctcctc cttgaaggga gggacatgtg ttcactcatc tattttcaag gcttattaca 420
gaaactgaaa catagtagat gcttacttgg gaatattata tctcaaaata gaaaaacacc 480
cagcaaatcg catcttatat tagtctttag aattagtatc aaagcctaata tattatgaca 540
cttgaaacat taaataactt agaaaacaaa gacttaaaag ttttatgata aagccagaaa 600
ctttttatac tgaccatttt taaatactga catttcagat taattggggg cagatgatat 660
atgaaattat agttttatact gtgacttctt aatacttcag ttgtgttaga taaactgata 720
gttcgtcaca tttt
734

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<210> 148

<211> 29

<212> PRT

<213> Homo sapiens

<400> 148

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Met Leu Lys Ile Ile Asp Lys Leu Tyr Phe Ser Tyr Leu His Ser Ala
 1             5             10            15

Asp Ile Leu Cys Asn Thr Glu Ser Tyr Thr Leu Ser Met
      20             25

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<210> 149

<211> 87

<212> PRT

<213> Homo sapiens

<400> 149

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Met Gly Trp His Glu Ile Gln Ile Pro Val Leu Ile Phe Leu Leu Ala
 1             5             10            15

Val Tyr His Arg Thr Ser His Phe Thr Ser Leu Pro Leu Gly Pro Gln
      20             25            30

Phe Ser Val Phe Leu Ile Tyr Lys Tyr Ser His Pro Ala Phe Arg Gln
      35             40            45

Val Leu Arg Leu Asn Lys Glu Phe Asn Leu Leu Trp Leu His Ile Lys
      50             55            60

His Ile Leu Val Ser Val Cys Leu Val Ile Ser Asn Ala Asn Ile Leu

```

65

70

75

80

Ser Ala Pro Cys Pro Glu Cys

85

<210> 150

<211> 45

<212> PRT

<213> Homo sapiens

<400> 150

Ser Ser Val Ala Leu Ala Leu Gly Ala Leu Thr Val Trp His Ala Val

1

5

10

15

Leu Ile Ser Arg Gly Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys

20

25

30

Glu Arg Arg Arg Leu Gln Ala Lys Gly Arg Val Ser Arg

35

40

45

<210> 151

<211> 152

<212> PRT

<213> Homo sapiens

<400> 151

Met Val Pro Glu Val Leu Ile Leu Cys His Gly Leu Ala Val Trp Lys

1

5

10

15

Trp Phe Pro Gly Leu Ala Val Leu Arg Ile Pro Gly Cys Val Thr Gly

20

25

30

Asn Lys Pro Phe Asn Leu Pro Gly Thr Val Phe Phe Cys Lys Met Arg

35

40

45

Gly Leu Gly Ala Ser Phe Leu Arg Pro Trp Gly Leu Val Ala Glu Phe

50

55

60

Ile Ser Pro Thr Pro Cys Pro Ser Ser Tyr Gly Ser Thr His Lys Ala

65

70

75

80

Phe His Ser His Lys Glu Lys Ala His Lys Val Pro Gln Pro Pro His

85

90

95

Thr Gln Glu Pro His Leu His Pro Ser Leu Lys Ala Arg Leu Pro Leu

100

105

110

<210> 154
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 154
 Met Thr His Ser Glu Leu Leu Leu Val Ile Thr Ile Asn His Lys Met
 1 5 10 15
 Pro Gln Gly Pro Arg Val Thr Asn Trp Glu Pro Pro Pro Leu Thr Arg
 20 25 30
 Ile Thr

<210> 155
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 155
 Met Asp Ser Phe Leu Leu Leu Arg Gln Arg Glu Gly Gly Lys Arg Asn
 1 5 10 15
 Phe Lys Arg Asn Leu Gln Thr Cys Cys Ala Val Gly Pro Thr Gly Ile
 20 25 30
 His Gly Gly Glu Thr Asn Ser Ile Met Leu Leu Gln Ile Leu Leu Lys
 35 40 45
 Lys Gly Phe Asn Cys Leu Thr Lys Tyr Ser Ser Phe Phe His Leu Leu
 50 55 60
 Thr Leu Gln Pro Asn Gln Val Pro His Thr Thr Gly Arg Cys Arg Glu
 65 70 75 80
 Ile Pro Gln Pro Glu Lys Ile Ile His Ala Gly Gln Arg Gln Lys Phe
 85 90 95
 Thr Pro Gly

<210> 156
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 156

Met Gln Phe Leu Leu Cys Leu Ser Leu Leu Asp Phe Phe Ser Ser Thr
1 5 10 15

Tyr Lys His Ala Val Met Ser Pro Asn Gln Lys Lys Cys Lys Asn Pro
20 25 30

Phe Ser Pro Met Leu Thr His His Pro Ala Val Val Leu Phe Leu Pro
35 40 45

Phe Thr Leu Leu Tyr Tyr Ser
50 55

<210> 157

<211> 59

<212> PRT

<213> Homo sapiens

<400> 157

Met Leu Gln Val Asp Val Cys Thr Leu Met Val Arg Thr Trp Ser Ser
1 5 10 15

Trp Pro Cys Trp Val Phe Ala Lys Glu Thr Val Leu Cys Ser Trp Gly
20 25 30

Arg Phe His His Leu Ile Arg Ala Val Val Pro Thr Trp Cys Ser Leu
35 40 45

Asp His Leu Tyr Lys Met Phe Ile Gly Gln Gly
50 55

<210> 158

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (41)

<220>

<221> UNSURE

<222> (57)

<400> 158

Met Thr Lys Arg Met Glu Lys Cys Leu Asn Ile Tyr Lys Arg Leu Asp
1 5 10 15

Val Tyr Arg Gln Ile Val Ser Lys Gly His Arg Ile Val Arg Asn Ser
20 25 30

Val Ile Leu Phe Cys Val Ile Asn Xaa Pro Phe Leu Tyr Pro Phe Thr
35 40 45

Leu Ile Ile Asp Ile His His Phe Xaa Val Ile Ile Gln Leu
50 55 60

<210> 159

<211> 47

<212> PRT

<213> Homo sapiens

<400> 159

His Leu Asn Arg Phe Ala Asn Ser Val Lys Val Phe Thr Arg Arg His
1 5 10 15

Ala Phe Val Lys Lys Phe Phe Arg Gly Ser Ala Cys Asn Cys Ala Glu
20 25 30

Ser Ala Leu Leu Ser Ser Gln Leu Ala His Cys Val Gly Arg Trp
35 40 45

<210> 160

<211> 43

<212> PRT

<213> Homo sapiens

<400> 160

Met Gln Glu Ala Glu Gly Arg Leu Asn Lys Pro Gln Gly Gly Arg Val
1 5 10 15

Gly Ala Glu Arg Val Gly Asn Ile Phe Phe Leu Leu Leu Asn Ser Arg
20 25 30

Lys Ala Lys Thr Gln Ser Lys Leu Phe Leu Ser
35 40

<210> 161

<211> 62

<212> PRT

20 25 30

His Phe Leu Ser Ile Leu Phe Pro Lys Tyr Phe Phe Ser Ala Pro Ser

35 40 45

Pro Ala Ala

50

<210> 164

<211> 27

<212> PRT

<213> Homo sapiens

<400> 164

Met Gly Ile Ile Pro Lys Cys Met Phe Leu Leu Gln Ser Arg Leu Met

1 5 10 15

Gly Val Ile Thr Asn Thr Ser Leu Leu Leu His

20 25

<210> 165

<211> 52

<212> PRT

<213> Homo sapiens

<400> 165

Met Lys Val Leu Lys Tyr His Asn Glu Ala Cys Gly Phe Tyr Ser Val

1 5 10 15

Val Trp Met Leu Ser Ser Ser Ile Pro Trp Met Pro Thr Gly Met His

20 25 30

Cys Leu Ile Leu Glu Phe Lys Arg Trp Pro Gln Thr Val Arg Leu Ser

35 40 45

Met Trp Pro His

50

<210> 166

<211> 47

<212> PRT

<213> Homo sapiens

<400> 166

Met Gly Arg Lys Ser Thr Asn Lys Thr Ala Cys Thr His Ile Asn Thr

1 5 10 15
Tyr Val Ser Thr Asn Asp Lys Leu Tyr Leu Tyr Arg Ala Trp Glu Gly
20 25 30
Ser Tyr Ile Thr Leu His Val Ser His Pro Pro His Thr Ser Arg
35 40 45

<210> 167
<211> 42
<212> PRT
<213> Homo sapiens

<400> 167
Met Cys Trp Gly Tyr Phe Ser Ile Ser Lys Lys Phe Pro Asn Leu Thr
1 5 10 15
Ser Val Leu Met Asn Leu Gly Thr Asp Leu Ala Val Arg Pro Thr Ser
20 25 30
Ile Phe Pro Thr Asp Ser Ile Leu Leu Glu
35 40

<210> 168
<211> 55
<212> PRT
<213> Homo sapiens

<400> 168
Met Asn Lys Ile Lys Gly Lys Ser Val Leu Phe Tyr Met Pro Glu Thr
1 5 10 15
Ser Arg Ile Phe Arg Lys Val Gln Phe Lys Glu Asn Gln Ala Ala Leu
20 25 30
Asp Ser Thr Asn Lys Asn Val Ser Leu Ser Glu Glu Leu Val Asn Gln
35 40 45
Gly Thr Gln Ser Ala Phe Ser
50 55

<210> 169
<211> 24
<212> PRT
<213> Homo sapiens

<400> 169

Met Met His Met Gln Leu Ile Ser Glu Phe Ser Cys Leu Cys Cys Phe
1 5 10 15

Phe Phe Leu Gly Ile Tyr Ile Lys
20

<210> 170

<211> 68

<212> PRT

<213> Homo sapiens

<400> 170

Met Ile His Leu Ser Glu Val Ser Gly His Leu Lys Glu Arg Lys Gly
1 5 10 15

Lys Ala Ser Cys Gln Lys Gln Lys His Val Leu Tyr Lys Arg Phe Lys
20 25 30

Asn Gln Asn Gly Ile Arg Leu Ser Asn Cys Lys Arg Gln Ser Ser Ala
35 40 45

Phe Lys Ile Leu Arg Lys Asn Asn Val Tyr Ile Lys Ile Phe Ile Ile
50 55 60

Ile Phe Asn Phe
65

<210> 171

<211> 100

<212> PRT

<213> Homo sapiens

<400> 171

Ser Phe Ala Phe Phe Phe Ser Leu Arg Gln Ser Leu Thr Leu Ser Pro
1 5 10 15

Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asn Leu Cys Leu
20 25 30

Leu Gly Ser Ser Asn Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile
35 40 45

Thr Gly Thr His His His Ala Gln Val Ile Phe Ile Phe Phe Ile Glu
50 55 60

Met Gly Phe Arg His Ile Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser
65 70 75 80

Gly Asp Pro Pro Ala Ser Ala Ser Glu Ser Ala Gly Ile Thr Gly Val
85 90 95

Arg His His Thr
100

<210> 172
<211> 58
<212> PRT
<213> Homo sapiens

<400> 172
Met Glu Cys Leu Ser Ile Asn Leu Thr Lys Asn Val Ser Tyr Leu Tyr
1 5 10 15

Thr Gly Pro Leu Asn Thr Ser Glu Thr Lys Leu Lys Ser Tyr Leu Ile
20 25 30

Gly Asn Gln Phe Pro Pro Arg Phe Ile Tyr Arg Val Ser Glu Ile Pro
35 40 45

Ile Lys Ile Ser Ala Arg Ser Leu Arg Asn
50 55

<210> 173
<211> 47
<212> PRT
<213> Homo sapiens

<400> 173
Met Asp Lys Glu Glu Ser Ala Val Leu Val Gly Gly Ser Ile Leu Pro
1 5 10 15

Asp Lys Leu Phe Leu Val Gly Phe Thr Asp Thr Ser Pro Asp Leu Leu
20 25 30

Pro Ala Ala Thr Val Cys Phe Tyr Asp Ala Cys His His Asp Ile
35 40 45

<210> 174
<211> 106

Met Ser Ser Ser Pro Leu Val Ser Ala Lys Phe Ser Phe Leu Phe His
 1 5 10 15
 Glu Gly Arg Ala Pro Ser Leu Phe His Pro Leu Met Thr Ser Gln Pro
 20 25 30
 Leu Glu Phe Cys Leu Met Met Asp Phe Ser Glu Ile Cys Leu Cys Asn
 35 40 45
 Glu Asp Lys Asp Ser Gly
 50

<210> 177
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 177
 Met Arg Pro Leu Lys Met Ile Arg Thr Ala Lys Lys Leu Phe Val Tyr
 1 5 10 15
 Leu Gly Ser Tyr
 20

<210> 178
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 178
 Met Met Tyr Tyr Pro Asp Asp Leu Trp Asn Leu Leu Arg Asn Arg Asp
 1 5 10 15

Cys Val Ala Phe Leu Ile Met Gly Thr Gly Pro Ser Leu Leu Arg Leu
 20 25 30

Pro Met Cys Val Gly Thr Glu Leu Leu Trp His Ser Ser Ser Arg Leu
 35 40 45

Met Glu Leu Ser Ser Ser Glu Ala Ser Trp Val Val His Ala Asn Leu
 50 55 60

Val Leu
 65

<210> 179
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 179
 Met Cys Val Ile Tyr Gln Arg Gly Ile Cys Asp Glu Lys Lys Asn Leu
 1 5 10 15
 Lys Cys Pro Gln Met Phe Gln Leu Ser Glu Thr Glu Lys Thr Leu Thr
 20 25 30
 Ser Val Phe Arg Ile Ile Val Ser Asn Ile Leu Lys Ile Asp Val Ser
 35 40 45
 Ser Val Met Ile Phe Leu Arg Leu His Gln Arg Thr Ser Leu Asn Leu
 50 55 60
 Ser Val Ile Gln Asn Gln
 65 70

<210> 180
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 180
 Met Asn Pro Val Cys Trp Val Gly Phe Gly Glu Val Asn Ile Glu His
 1 5 10 15
 Met Glu Phe Lys Tyr Ile Glu Met Asp Thr Val Ile Glu Met
 20 25 30

<210> 181
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 181
 Met His Ala Cys Gly Ser Leu Arg Leu Asp Lys Asp Pro Thr Thr Leu
 1 5 10 15
 Leu Cys Val Asn Thr Arg Cys Thr Arg Ser His Leu Pro Gly Ala Gly
 20 25 30
 Gly Trp Trp Arg Lys Val Lys Ser Gln Gln Thr Val His Arg Thr Tyr

35

40

45

Ser Ala Thr Gly Lys Lys Ser
50 55

<210> 182

<211> 16

<212> PRT

<213> Homo sapiens

<400> 182

Met Pro Ala Leu Arg Glu Ala Phe Pro Gln Ala Pro Leu Ala Leu Ala
1 5 10 15

<210> 183

<211> 48

<212> PRT

<213> Homo sapiens

<400> 183

Met Thr Phe Gln Lys Leu Met Ile Leu His Ile His Asp Gln Met Phe
1 5 10 15

Ser Leu Met Glu Ala Ser Asp Val Cys Ser His Gln Ile Arg Phe Lys
20 25 30

Met Ser Val Ser Ser Lys Ser Ser Lys Thr Ser Pro Ser His Gln Lys
35 40 45

<210> 184

<211> 55

<212> PRT

<213> Homo sapiens

<400> 184

Met Ser Val Leu Lys Arg Phe Leu Lys Pro Ser Leu Ser Ile Ala Lys
1 5 10 15

Thr Cys Tyr Val His Tyr Pro Pro Asn Ser Tyr Leu Lys Thr Thr Pro
20 25 30

Lys Met Leu Tyr Phe Val Phe Lys Val Arg Glu Glu Asn Arg Gly Glu

35

40

45

Val Phe Leu Cys Ser Phe Pro
50 55

<210> 185

<211> 14

<212> PRT

<213> Homo sapiens

<400> 185

Met Trp Leu Arg Asp Leu Asn Tyr Lys Ile Ala Arg Leu Asp
1 5 10

<210> 186

<211> 42

<212> PRT

<213> Homo sapiens

<400> 186

Met Met Phe Phe Tyr Ile Phe Cys Ser Met Gly Leu Leu Ile Pro Phe
1 5 10 15

Ser Thr Leu Lys Met Leu Leu Ile Val Phe Pro Leu Ser Leu Phe Pro
20 25 30

Lys Arg Asn Leu Leu Ser Phe Leu Ser Leu
35 40

<210> 187

<211> 100

<212> PRT

<213> Homo sapiens

<400> 187

Leu Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly
1 5 10 15

Val Gln Val Val Asp Ile Gly Ser Leu Gln Pro Leu Pro Pro Gly Phe
20 25 30

Lys Gln Phe Ser Cys Pro Ser Leu Leu Ser Ser Trp Asp Tyr Arg His
35 40 45

Gly Pro Pro Arg Pro Ala Asn Phe Phe Val Phe Leu Val Glu Met Gly

50

55

60

Phe His His Val Gly Gln Ala Gly Pro Glu Leu Leu Thr Ser Ser Asp
65 70 75 80

Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His
85 90 95

Leu Thr Trp Pro
100

<210> 188

<211> 106

<212> PRT

<213> Homo sapiens

<400> 188

Met Ser Cys Leu Trp Pro Ser Leu Asp Leu Pro Ser Leu Ser His Ser
1 5 10 15

Lys Gln Ser Ser Ser Gln Ala Glu Gly Gln Val Thr Ser His Thr Arg
20 25 30

Gln Arg Phe Pro Asp Gly Ala His Leu His Pro Ser Leu Thr Leu Val
35 40 45

Leu Ser Gln Asp Ala Pro Leu Arg Leu Ala Pro Pro Thr Leu Cys Leu
50 55 60

Leu Cys Tyr Trp Ala Ser Leu Pro Ser Pro Arg Thr Pro Glu Leu Leu
65 70 75 80

Asn Ala Gly Gln Lys Ser Ile Pro Asp Leu Gln Gln Arg His Phe Asp
85 90 95

Ile Lys Glu Met Ala Leu Asp Phe Cys Leu
100 105

<210> 189

<211> 46

<212> PRT

<213> Homo sapiens

<400> 189

Met Val Ile Ser Arg Ile Ser Ile Leu Arg Lys Met Thr Lys Phe His
1 5 10 15

Lys Phe Cys Ser Gln Leu Thr Glu Pro Gly Arg Arg Thr Gln Pro Lys
 20 25 30

Glu Asn Pro Trp Ser Leu Tyr Asp Thr Asp Trp Leu Glu Lys
 35 40 45

<210> 190

<211> 46

<212> PRT

<213> Homo sapiens

<400> 190

Met Ser Arg Val Arg Ala Glu Lys Pro Gly Arg Val Ala Lys Leu Ala
 1 5 10 15

Ala Cys Arg Pro Leu Pro Arg Leu Gln Met Ser Gly Ser Ile Pro Leu
 20 25 30

His Lys Cys Lys Glu Lys Ala Ser Met Pro Pro Leu Trp Ser
 35 40 45

<210> 191

<211> 50

<212> PRT

<213> Homo sapiens

<400> 191

Met Arg Pro Ala Arg Leu Gly Pro Arg Cys Ser Asp Leu Asp Phe Gly
 1 5 10 15

Leu Val Leu Ser Ser Trp Leu Arg Leu Ala Arg Cys Pro Leu Glu Ser
 20 25 30

Ser Phe Gly Phe Ala Phe Phe Val Cys Leu Phe Ser Pro Asn Phe Cys
 35 40 45

Gln Thr
 50

<210> 192

<211> 76

<212> PRT

<213> Homo sapiens

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Pro Thr Leu Leu Met Ser Leu Arg Gly Leu Gly Glu Arg Ser Asn Glu
20 25 30

Pro His Val Ser Pro Glu Ser Ser Ala Ala Pro Lys Ala Gly Pro Ser
35 40 45

Leu Glu Asp Cys Glu Arg Glu Asp Gly Ser Ile Arg Thr Gly Trp Asp
50 55 60

Thr Ala Pro Thr Lys Glu Ser Pro Thr Ser Cys Ala
65 70 75

<211> 54

<213> Homo sapiens

Arg Thr Val Cys Thr Lys Val Ser Cys Pro Val Gln Leu Pro Ala Asp
1 5 10 15

Trp Thr Cys Lys Val Gln Pro Val Trp Leu Glu Phe Pro Cys Leu Pro
20 25 30

Ile Ser Cys Arg Leu Arg Val Ser Ser Asp Thr Ser Pro Asp Ser Ala
35 40 45

Thr Trp Gly Ser Trp Lys
50

<211> 27

<213> Homo sapiens

Met Glu Pro Arg Ile Pro Val Lys Thr Phe Ser Phe Asp Lys Arg Ile
1 5 10 15

Leu Ile Arg Ile Leu Tyr Gln Ile Glu Gln Lys
20 25

<210> 195
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 195
 Met Leu Gln His Leu Arg Leu Thr Ile Trp Gly Glu Cys Val Trp Val
 1 5 10 15

Phe

<210> 196
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 196
 Met Arg Asn Val Ser Leu Ile Ser Cys Glu Asp Ala Asp Phe Thr Glu
 1 5 10 15

Ala Leu Cys Asn Ile Trp Phe Val His Gln Thr Met Leu Ile Asp Cys
 20 25 30

Arg Ser His Leu Leu Pro Arg Trp Leu Thr Lys Thr Val Gly Ser Leu
 35 40 45

Leu Lys Pro
 50

<210> 197
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 197
 Met Ser His Gly Gln Val Leu Gly Asp Val Ala Gly Lys Val Gly His
 1 5 10 15

Ala Leu Gly Thr Glu Asp Gln Thr Phe Ala Val Glu Val Leu Lys Glu
 20 25 30

Thr Thr Pro Phe Phe Arg Ala Ser Ser Gly Pro Thr Gly Asp Pro Trp
 35 40 45

Cys Pro Asp His Lys Ile Gln Ser Lys Pro Val Ser Leu Ser
 50 55 60

<210> 198
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 198
 Met Leu Leu Leu Val Thr Ser Leu Leu Leu Cys Glu Leu Pro His Pro
 1 5 10 15

Ala Phe Leu Leu Ile Pro Glu Lys Ser Asp Leu Arg Thr Val Ala Pro
 20 25 30

Ala Ser Ser Leu Asn Val Arg Phe Asp Ser Arg Thr Met Asn Leu Ser
 35 40 45

Trp Asp Cys Gln Glu Asn Thr Thr Phe Ser Lys Cys Phe Leu Thr Asp
 50 55 60

Lys Lys Asn Arg Val Val Glu Pro Arg Leu Ser Asn Asn Glu Cys Ser
 65 70 75 80

Cys Thr Phe Arg Glu Ile Cys Leu His Glu Gly Val Thr Phe Glu Val
 85 90 95

His Val Asn Thr Ser Gln Arg Gly Phe Gln Gln Lys Leu Leu Tyr Pro
 100 105 110

Asn Ser Gly Arg Glu Gly Thr Ala Ala Gln Asn Phe Ser Cys Phe Ile
 115 120 125

Tyr Asn Ala Asp Leu Met Asn Cys Thr Trp Ala Arg Gly Pro Thr Ala
 130 135 140

Pro Arg Asp Val Gln Tyr Phe Leu Tyr Ile Arg Asn Ser Lys Arg Arg
 145 150 155 160

Arg Glu Ile Arg Cys Pro Tyr Tyr Ile Gln Asp Ser Gly Thr His Val
 165 170 175

Gly Cys His Leu Asp Asn Leu Ser Gly Leu Thr Ser Arg Asn Tyr Phe
 180 185 190

Leu Val Asn Gly Thr Ser Arg Glu Ile Gly Ile Gln Phe Phe Asp Ser
 195 200 205

Leu	Leu	Asp	Thr	Lys	Lys	Ile	Glu	Arg	Phe	Asn	Pro	Pro	Ser	Asn	Val
210						215					220				
Thr	Val	Arg	Cys	Asn	Thr	Thr	His	Cys	Leu	Val	Arg	Trp	Lys	Gln	Pro
225					230					235					240
Arg	Thr	Tyr	Gln	Lys	Leu	Ser	Tyr	Leu	Asp	Phe	Gln	Tyr	Gln	Leu	Asp
				245					250					255	
Val	His	Arg	Lys	Asn	Thr	Gln	Pro	Gly	Thr	Glu	Asn	Leu	Leu	Ile	Asn
			260					265					270		
Val	Ser	Gly	Asp	Leu	Glu	Asn	Arg	Tyr	Asn	Phe	Pro	Ser	Ser	Glu	Pro
		275					280					285			
Arg	Ala	Lys	His	Ser	Val	Lys	Ile	Arg	Ala	Ala	Asp	Val	Arg	Ile	Leu
	290					295					300				
Asn	Trp	Ser	Ser	Trp	Ser	Glu	Ala	Ile	Glu	Phe	Gly	Ser	Asp	Asp	Gly
305					310					315					320
Asn	Leu	Gly	Ser	Val	Tyr	Ile	Tyr	Val	Leu	Leu	Ile	Val	Gly	Thr	Leu
				325					330					335	
Val	Cys	Gly	Ile	Val	Leu	Gly	Phe	Leu	Phe	Lys	Arg	Phe	Leu	Arg	Ile
			340					345					350		
Gln	Arg	Leu	Phe	Pro	Pro	Val	Pro	Gln	Ile	Lys	Asp	Lys	Leu	Asn	Asp
		355					360					365			
Asn	His	Glu	Val	Glu	Asp	Glu	Ile	Ile	Trp	Glu	Glu	Phe	Thr	Pro	Glu
	370					375					380				
Glu	Gly	Lys	Gly	Tyr	Arg	Glu	Glu	Val	Leu	Thr	Val	Lys	Glu	Ile	Thr
385					390					395					400

<210> 199

<211> 10

<212> PRT

<213> Homo sapiens

<400> 199

Met Asp Arg Met Glu Lys Arg Gln Thr Asp

1 5 10

<210> 200
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 200
 Met Cys Tyr Ala Thr Leu His Gln Ile Asn Phe Leu Gln Thr Val Leu
 1 5 10 15

Val Pro Gly Leu
 20

<210> 201
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 201
 Met Cys Leu Cys Cys Trp Leu Tyr Trp Glu Glu Tyr Gly Pro Leu Ser
 1 5 10 15

Leu Thr Gln Glu Phe His Val Phe Cys Gln Asp Thr Leu His Gly
 20 25 30

<210> 202
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 202
 Met Asn His Ser Leu Ser Ala Phe Gln Arg Ala Leu Gln Val Leu Ile
 1 5 10 15

Phe Lys Met Ser Val Tyr Ala Ser Gly Pro Arg Leu Glu Lys Lys Val
 20 25 30

Gly Asn Lys Leu Glu Gly Gly Arg Lys Gln Glu Arg Asn Val Thr Tyr
 35 40 45

Met Ala Asp Glu Gly Phe
 50

<210> 203
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 203
 Met Ile Lys Ala Tyr His Pro Tyr Phe Glu Asn Phe Asn His Arg Ala
 1 5 10 15
 Gln Tyr Val Ser Asn Lys Leu Lys Lys Tyr Ser Phe Gln Leu His Phe
 20 25 30
 Asp Gly His
 35

<210> 204
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 204
 Met Lys Met Val Asn Arg His Met Lys Trp Lys Ser Ser Ala Leu Ser
 1 5 10 15
 Asp Leu Val Cys Ile Ser Thr Glu Ile Gln Ala Gly Leu Thr Arg His
 20 25 30
 Thr Ser His Asn Phe Gln Cys His Cys Thr Ile Ile Leu Thr Val Val
 35 40 45
 Ser Phe Phe Gln Ser Thr Glu Lys Gln Ala Asp Lys Pro Arg His Leu
 50 55 60
 Asn Val Thr Trp Leu Met Thr Leu Ile Ser Thr Leu
 65 70 75

<210> 205
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 205
 Met Glu Gly Gln Asp Ser Leu Arg Asp Val Gly Ala Leu Ser His Leu
 1 5 10 15
 Ala His Thr Asp Arg Ser Trp Leu Gly Arg Ala Gly Val Ser Ala Trp

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20 25 30
Arg Pro Ser Ala Ala Gly Asp Pro Gly Phe His Glu Val Gly Gly Val
35 40 45
His Ala Gly Thr Ser Gln Leu Ala Gly Pro Gly Gly His Pro Gly Gly
50 55 60
Ala Gly Ala Trp Gly His Glu Phe Thr Lys Val Ala Gln Gly Gln Glu
65 70 75 80
Glu Thr Val Val Ala Glu Gly Pro Leu Val Glu Ala Trp Ala
85 90

<210> 206

<211> 53

<212> PRT

<213> Homo sapiens

<400> 206

Met Pro Gln Asp Gln Asp Pro Pro Arg Glu Glu His Ala Ala Leu Arg
1 5 10 15

Val Leu Phe Pro Arg Val Pro Leu Ala Val Pro His Gln Leu Gly Gly
20 25 30

Glu Leu Glu Arg Ala Asp Arg Arg Thr Gly Phe Ser Ala Cys Ala Asn
35 40 45

Ile Leu Thr Cys Pro
50

<210> 207

<211> 75

<212> PRT

<213> Homo sapiens

<400> 207

Trp Ser Thr Pro Pro Phe Asp Pro Arg Phe Pro Ser Gln Asn Gln Ile
1 5 10 15

Arg Asn Cys Tyr Gln Asn Phe Leu Asp Tyr His Arg Cys Leu Lys Thr
20 25 30

Arg Thr Arg Arg Gly Lys Ser Thr Gln Pro Cys Glu Tyr Tyr Ser Cys
35 40 45

Val Tyr His Ser Leu Cys Pro Ile Ser Trp Val Glu Ser Trp Asn Glu
 50 55 60

Gln Ile Lys Asn Gly Ile Phe Ala Gly Lys Ile
 65 70 75

<210> 208
 <211> 44
 <212> PRT
 <213> Homo sapiens

<400> 208
 Met Arg Val Leu Arg Lys Glu Ser Pro Ser Arg His Val Leu Lys Asn
 1 5 10 15

Met Cys Leu Ile Arg Asn Pro Arg Glu Gly Thr Ala Ala Asn Asn Glu
 20 25 30

Met Glu Ser Ala Thr Gly Glu Glu Lys Gly Asn Arg
 35 40

<210> 209
 <211> 83
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (80)
 <223> a, c, g or t

<400> 209
 Met His Arg Lys Lys Lys Leu Glu Ser Phe Leu Leu Leu Ile Pro Pro
 1 5 10 15

Pro Tyr Leu Pro Leu Thr Lys Met Trp Gly Glu Pro Arg Phe Glu Gly
 20 25 30

Ser Thr Gly Pro Cys Pro Gln Asp Ser Met Glu Gln Pro Val Thr Lys
 35 40 45

Gln Gly Ile Ser Leu Lys Ser Cys Leu Pro Lys Lys Ile Lys Leu Pro
 50 55 60

Arg Leu Ala Leu His Pro Ser Pro Pro Arg Ser Phe Pro Leu Lys Xaa

80

<213> Homo sapiens

<213> Homo sapiens

<210> 212

<211> 38
 <212> PRT
 <213> Homo sapiens

<400> 212
 Met Met Pro Gly Pro Ala Ala Leu Ile Pro Pro Thr Ala Thr Ala Cys
 1 5 10 15
 Leu Leu Val Val Ala Arg Gly Ser Ser Val Pro Lys Asp Ser Ser Leu
 20 25 30
 Phe Cys Ile Thr Val His
 35

<210> 213
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 213
 Met Ser Leu Leu Asp Ala Ser Ser Leu Lys Pro Tyr Asp Ser Phe Leu
 1 5 10 15
 Leu Ala Val Leu Phe Leu Thr Arg Asp Asn Lys Gly Phe Ala Ser Gln
 20 25 30
 Val Cys Met Ala Lys Lys Val Ser Thr Ser Val Asn Gly Ser Phe Leu
 35 40 45
 Met Thr Ser Gln Gln Pro Leu Val Lys Asp Val Ile Glu Ile Val Gln
 50 55 60
 Arg Leu Gly Ser Val Cys Phe Val Leu Leu Leu Lys Ser Phe His Gly
 65 70 75 80
 Ser Lys Leu Phe Leu Ser Ile Val
 85

<210> 214
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 214
 Met Val Ile Arg Glu Leu Leu Gly Gly Gln Lys Tyr Pro Asn Pro Val
 1 5 10 15

Gln Gly Arg Asp Pro Trp Thr Val Thr Val Leu Ser Ala Phe Gly Arg
 20 25 30

Glu Gly Asp Ser Glu Ala Gln Thr Arg Ile
 35 40

<210> 215

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (46)

<400> 215

Met Pro Asn Cys Ser Val Glu Leu Arg Gly Tyr Tyr Tyr Asn Phe Val
 1 5 10 15

His Tyr Tyr Lys Tyr Phe Ile Leu Val Val Tyr Ser Thr Ala Asp Ser
 20 25 30

Asn Gln Lys Thr Lys Ile Gln Lys Tyr Tyr Ile Leu Glu Xaa Ile Ile
 35 40 45

Met

<210> 216

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (6)

<220>

<221> UNSURE

<222> (8)

<400> 216

Met Glu Met Leu Glu Xaa Lys Xaa Thr Ile Ile Asp Ile Val Ser Leu
 1 5 10 15

Leu Ala Leu Ser Gly Asp Leu Thr Gln Leu Arg Lys Ser Leu Val Thr
 20 25 30

Leu Lys Ile Cys Arg
 35

<210> 217

<211> 72

<212> PRT

<213> Homo sapiens

<400> 217

Met Gly Ser Tyr Gly Leu Leu Phe Lys Phe Tyr Gly Ala Ile Phe Thr
 1 5 10 15

Ser Val Ala Gln Gly Trp Ser Val Leu His Leu Arg Lys Val Ser Leu
 20 25 30

Gly Lys Cys Pro Cys His Pro Ser His Ser Arg Gln Ala Ala Ser Ser
 35 40 45

Ala Phe Ser Ser Ser Ser Ser His Ala Trp Ser Ser Pro Phe Val Ile
 50 55 60

Phe Ser Ser Leu Thr Pro Ser Leu
 65 70

<210> 218

<211> 49

<212> PRT

<213> Homo sapiens

<400> 218

Met Gly Ser Phe Ser Pro Leu Thr Tyr His Leu Gly His Trp Asn Met
 1 5 10 15

Ala Ala Cys Gly Ser Val Cys Glu Gly Pro Gly Asp Gly Gln Gly Gly
 20 25 30

Ser Ala Leu Phe Cys Phe Tyr Gln His Cys Ser Met Asn Val Phe Leu
 35 40 45

Thr

<210> 219
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 219
 Met Leu Thr Arg His His Pro Leu Asn Val Leu Leu His Arg Leu Cys
 1 5 10 15
 Leu Asn Trp Leu Glu Glu Asn Asn Tyr Pro Arg Asn Thr Asp Tyr Leu
 20 25 30
 Ile Phe

<210> 220
 <211> 34
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (17)
 <400> 220
 Met Leu Leu Leu Pro Ala Thr Phe Leu Pro Thr Ser His Ala Arg Pro
 1 5 10 15
 Xaa Gln Pro His Cys His Thr Thr Cys Leu Ile Thr Ser His Val Leu
 20 25 30
 Thr His

<210> 221
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 221
 Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln
 1 5 10 15
 Leu Ile Asn Leu Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp
 20 25 30

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Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro
 35 40 45

Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro
 50 55 60

Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr
 65 70 75 80

Gly Cys Gly Ser Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln
 85 90 95

Cys Ser Val Val Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr
 100 105 110

<210> 222

<211> 111

<212> PRT

<213> Homo sapiens

<400> 222

Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln
 1 5 10 15

Leu Ile Asn Leu Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp
 20 25 30

Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro
 35 40 45

Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro
 50 55 60

Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr
 65 70 75 80

Gly Cys Gly Ser Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln
 85 90 95

Cys Ser Val Val Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr
 100 105 110

<210> 223

<211> 83

<212> PRT

<213> Homo sapiens

<400> 223

Met Asn Val Glu Ala Arg Glu Gln Cys Asp Val Gln Leu Ser Asp Leu
1 5 10 15

Thr Trp His Leu Ile Trp Leu Glu Val Pro Pro Leu Leu Ser Val Pro
20 25 30

Trp Leu Trp Ala His Gly Leu Ala Glu Pro Ser Tyr Gly Phe Arg Phe
35 40 45

Thr Cys Tyr Asn Ile Gln Arg Gln Cys Thr Ser Leu Pro Arg Lys Leu
50 55 60

Cys Ser Arg His Pro Phe Val Thr Leu Ile Ser Ile Met Asp Thr Thr
65 70 75 80

Thr Phe Tyr

<210> 224

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (3)

<220>

<221> UNSURE

<222> (11)

<220>

<221> UNSURE

<222> (14)

<400> 224

Met Asp Xaa Thr Arg Val His Asp Asp Glu Xaa Val Ile Xaa Gly Asp
1 5 10 15

Val Phe Val His Glu Val Thr Pro Gly Pro His Arg Trp Val Leu Val
20 25 30

Arg Pro Phe Cys Leu Glu Val Arg Ala Val Phe Leu Arg Leu Trp Tyr
35 40 45

Tyr Arg Gly Glu Lys Glu Glu Glu Leu Glu Val Arg Glu Arg Ser Cys
50 55 60

Arg Leu Gly Arg Cys Asp Gln Gly Gln Arg Asp Gly Val Gln Glu Ala
65 70 75 80

Cys Ser Ser Val Ser Cys Ser Leu Arg Gln Glu Val Ser Pro Ser Ser
85 90 95

Gln Leu Asp Met Arg Ser Leu Leu Gly Val Pro Leu Ala Glu Val Glu
100 105 110

Pro Val Ala Gln His Pro Pro Asn Glu Gly Arg Gly Arg His Leu Gly
115 120 125

Gln Cys Leu Leu
130

<210> 225

<211> 38

<212> PRT

<213> Homo sapiens

<400> 225

Met Ile Asn Asn Ser Asn His Asn Asn Ser Ser Ser Ser Lys Leu Arg
1 5 10 15

Ala Ser Tyr Val Gln Ala Phe Ser Lys His Phe Thr Cys Ile Thr Pro
20 25 30

Leu Val Ile Thr Thr Pro
35

<210> 226

<211> 58

<212> PRT

<213> Homo sapiens

<400> 226

Met Ser Thr Phe Thr Val Leu Lys Asn Thr His Gln Leu Lys Lys Asn
1 5 10 15

Thr Leu Phe Pro Phe Leu Gly His Leu Asn Leu Arg Glu Gln Leu Leu
20 25 30

Tyr Lys Asn Asp Ile Lys Ile Ile His Phe Gly Ser Met Phe Leu Thr

35

40

45

Val Leu Arg Gly Cys Met Val Lys Leu Lys
50 55

<210> 227

<211> 26

<212> PRT

<213> Homo sapiens

<400> 227

Met His Met His Ile Phe Leu Cys Leu Tyr Asn Leu Cys Asn Ile Cys
1 5 10 15

Glu Cys Asn Thr Phe Ser Phe Phe Leu Leu
20 25

<210> 228

<211> 47

<212> PRT

<213> Homo sapiens

<400> 228

Met Leu Asp Val Met Arg Gln Val Ala Arg Ser Trp Leu Thr Ala Met
1 5 10 15

Glu Arg Leu Leu Leu Pro Ala Ala Val Arg Phe Ser Ala Ile Trp Leu
20 25 30

Ala Gly Gln Phe Ala Met Ala Trp Leu Leu Gln Leu Ile Leu Gly
35 40 45

<210> 229

<211> 53

<212> PRT

<213> Homo sapiens

<400> 229

Met Gly Asn Ile Gly Glu Thr Leu Ser Leu Lys Lys Lys Arg Arg Ala
1 5 10 15

Gly Gly Glu Ser Val Lys Asp Pro Gly Ser Thr Asp Thr Gly Gly Gln
20 25 30

Arg Thr Arg Val Gly Val Ser Ser Asn Asp Ser Val Gly Ser Met Gly

35

40

45

Ala Val Gly Arg Glu
50

<210> 230

<211> 80

<212> PRT

<213> Homo sapiens

<400> 230

Met Val Ile Asn Ser Cys Ile Ile Pro Leu Pro Ser Gln Ala Thr Ile
1 5 10 15

Pro Glu Pro Trp Pro His Gly Ala Cys Ile Phe Arg Ile Gln Thr Pro
20 25 30

Trp Gly Ser Ser Pro Leu Leu Pro Ser Leu Ser Ser His Pro Leu Thr
35 40 45

His Leu Ser Cys Tyr Leu Ser Leu Glu Ile Pro Lys Met Met Cys Val
50 55 60

Met Glu Arg Leu Glu His Gln Leu Gln Asn His Pro Val Thr Leu Ala
65 70 75 80

<210> 231

<211> 40

<212> PRT

<213> Homo sapiens

<400> 231

Met Phe Gln Arg Phe Leu Ala Lys Val Thr Val Trp Met Val Val Pro
1 5 10 15

Leu Thr Lys Thr Ala Met Asn Ala Lys Arg Ala Ser Phe Val Gly Arg
20 25 30

His Lys Ile Ile Phe Arg Ile Cys
35 40

<210> 232

<211> 24
 <212> PRT
 <213> Homo sapiens

<400> 232
 Met Leu Leu Tyr Leu Ile Thr Arg Gly Asp Val Glu Asn Gly Cys Phe
 1 5 10 15

 Ile Phe Ser Val Val Phe Ala Leu
 20

<210> 233
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 233
 Met Pro Pro Arg Gly Leu Pro His Phe Ser Pro His Pro Thr Arg Gln
 1 5 10 15

 Phe Leu Phe Leu Phe Pro Leu His Thr Lys
 20 25

<210> 234
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 234
 Met Ser Tyr Glu Ile Leu Val Asn Thr Asp Phe Met Ser Pro Phe Leu
 1 5 10 15

 Arg Thr Leu Leu Val Cys Phe His Leu Tyr Ala Leu Ile Arg Ala Asn
 20 25 30

 Asn Leu Lys Tyr Pro
 35

<210> 235
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 235
 Met Gly Lys Gly Leu Arg Leu Gly Val Ser Ile Ile Leu Val Lys Ser

1 5 10 15

Phe Phe Thr Tyr Ser Ser Lys Asp Val Asn Tyr Phe Ser Ile His Ser
20 25 30

Asn Ile Lys Ala Val Phe His Phe
35 40

<210> 236

<211> 40

<212> PRT

<213> Homo sapiens

<400> 236

Met Glu Glu Thr Gly Pro Leu Pro Ser Gly Ser Ser Leu Ser Asp Gln
1 5 10 15

Gly Glu Thr Ala Leu Ala Leu Gly Asn Ser Arg Ser Asp Gly Gly Arg
20 25 30

Gln Ser Ser Ser Ser Met Asn Ala
35 40

<210> 237

<211> 50

<212> PRT

<213> Homo sapiens

<400> 237

Met His Lys Gln Ser Met Ala Arg Ser Ile Leu Arg Ser Pro Leu Gln
1 5 10 15

Gln Ile Pro Pro Lys Gly Glu Ala Gly Arg Trp Arg Trp Ala Glu Ala
20 25 30

Ser Cys Val Leu His Thr Phe Ser Thr Ile Leu Asp Phe Leu Phe Phe
35 40 45

Phe Phe
50

<210> 238

<211> 49

<212> PRT

<213> Homo sapiens

<400> 238

Ser Ser Trp Gly Asp Ser Phe Ala Val Ser Ala Ala Trp Ala Arg Lys
1 5 10 15

Gly Ile Glu Glu Trp Ile Gly Arg Gln Arg Cys Pro Gly Gly Val Ser
20 25 30

Gly Pro Arg Gln Leu Arg Leu Ala Gly Thr Ile Gly Arg Ser Thr Arg
35 40 45

Glu

<210> 239

<211> 54

<212> PRT

<213> Homo sapiens

<400> 239

Met Leu Arg Pro Leu Thr Val Ala Ser Lys Arg Leu Leu Thr Ile Ser
1 5 10 15

Thr Leu Lys Ser Pro Leu Val Gly Leu Cys Ser Phe Ser Lys Ser Gly
20 25 30

Val Leu Arg Glu Gln Ala Leu Phe Ser Ile Ile Asn Leu Ile Asn Thr
35 40 45

Asp Trp Gln Lys Gln His
50

<210> 240

<211> 23

<212> PRT

<213> Homo sapiens

<400> 240

Met Lys Lys Lys Ser Tyr Pro Asp Lys Ile Asn Gln Cys Phe Ile Phe
1 5 10 15

Leu Glu His Gln Asn Leu Leu
20

<210> 241

<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (6) .. (7)

<220>
<221> UNSURE
<222> (9)

<220>
<221> UNSURE
<222> (13)

<220>
<221> UNSURE
<222> (23)

<220>
<221> UNSURE
<222> (27) .. (31)

<220>
<221> UNSURE
<222> (38) .. (40)

<220>
<221> UNSURE
<222> (43)

<220>
<221> UNSURE
<222> (45)

<220>
<221> UNSURE
<222> (47)

<400> 241
Met Val Lys Tyr Met Xaa Xaa Leu Xaa Leu Thr Pro Xaa Phe Ser Asn
1 5 10 15

Leu Leu Gly Thr Leu Lys Xaa Arg Lys Val Xaa Xaa Xaa Xaa Xaa Pro
20 25 30

Arg Lys Arg Asn Phe Xaa Xaa Xaa Pro Pro Xaa Leu Xaa Lys Xaa Arg

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35

40

45

Cys His Phe Leu His Ile Asp Leu Gln Arg Val
50 55

<210> 242

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (53)

<400> 242

Met Val Ser Gly Val Gln Val Ser Leu His Lys Thr Lys Ile Lys Leu
1 5 10 15

Phe Asn Thr Gly Pro Thr Thr Leu Ile Tyr Gly Ala Asn Thr Cys Cys
20 25 30

Glu Pro Trp Gly Gln Gly Leu Gly Asp Lys Val Ala Thr Ile Phe Trp
35 40 45

Gly Val Gly Gly Xaa Gly Gly
50 55

<210> 243

<211> 75

<212> PRT

<213> Homo sapiens

<400> 243

Met Val Ile Thr Cys Val Leu Tyr Asp Ile Ser Ser Leu Lys Asn Leu
1 5 10 15

Arg His Ser Pro Phe Leu Gln Val Phe Phe Cys Val Cys Trp Lys Ile
20 25 30

Met Tyr Ile Phe Gln Leu Leu Asn Ala Ser Val Cys Ile Cys Ile Ser
35 40 45

Thr Lys Ser Lys Leu Leu Ile Leu Leu Phe Lys Leu Phe Ala Ser Tyr
50 55 60

Trp Phe Ser Leu Pro Thr Leu Cys Ile Asn Ser

65

70

75

<210> 244

<211> 17

<212> PRT

<213> Homo sapiens

<400> 244

Met Ser Trp Val Pro Cys Gly Cys Asp Phe Leu Arg Glu Ile Asn Leu

1

5

10

15

Phe

<210> 245

<211> 30

<212> PRT

<213> Homo sapiens

<400> 245

Met Tyr Val Ser Pro Asp Asn Ile Ser Gly Ser Gly Asn Cys Lys Lys

1

5

10

15

Lys Ile Gly Asn Gln Asn Ser Arg Lys Val Phe Leu Glu Gly

20

25

30

<210> 246

<211> 57

<212> PRT

<213> Homo sapiens

<400> 246

Arg Val Thr Met Asn Glu Lys Asp Asn Phe Met Asn Ala Glu Asn Leu

1

5

10

15

Gly Ile Val Phe Gly Pro Thr Leu Met Arg Pro Pro Glu Asp Ser Thr

20

25

30

Leu Thr Thr Leu His Asp Met Arg Tyr Gln Lys Leu Ile Val Gln Ile

35

40

45

Leu Ile Glu Asn Glu Asp Val Leu Phe

50

55

<210> 247
 <211> 70
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (38)

<400> 247
 Met Phe Ala Ser Leu Leu Ile Thr Asn Leu Leu Ser Thr Asn Glu Lys
 1 5 10 15

Tyr Ile Gln Asp Leu Pro Phe Gln Arg Leu Ser Ile Tyr Glu Thr Asn
 20 25 30

Ser Pro Phe Arg Leu Xaa Asn Phe Glu Asp Val Phe Ile Phe Leu Phe
 35 40 45

Phe Leu Asn Lys Asn Cys Phe Leu Ser Arg Leu Phe Lys Ala Thr Cys
 50 55 60

Val Lys Pro Leu Val Gln
 65 70

<210> 248
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 248
 Met Arg Arg Ala Arg Pro Pro Leu Phe Phe Leu His Ala Val Ser Ser
 1 5 10 15

Pro Gly Gln Ile Leu Thr Ser Lys Asn Ala Val Phe Pro Ser Gly Ala
 20 25 30

Gly Pro Val Met
 35

<210> 249
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 249

Met Ser Leu Ser Phe Ser Leu His Ser Phe Tyr Arg Lys Ala Ile Leu
 1 5 10 15

Gly Val Leu Gly His Phe Asp Ser Thr Ser
 20 25

<210> 250
 <211> 43
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (6)

<400> 250
 Met Ser Leu Pro Ser Xaa Arg Arg Gln Phe Ser Asp Ile Thr Cys Thr
 1 5 10 15

Glu Ile His Tyr Asn Ala Thr Met Asn Gly Gln Ser Ser Thr Glu Lys
 20 25 30

Ile Lys Gln Arg Met Ser Trp Lys Val Leu Trp
 35 40